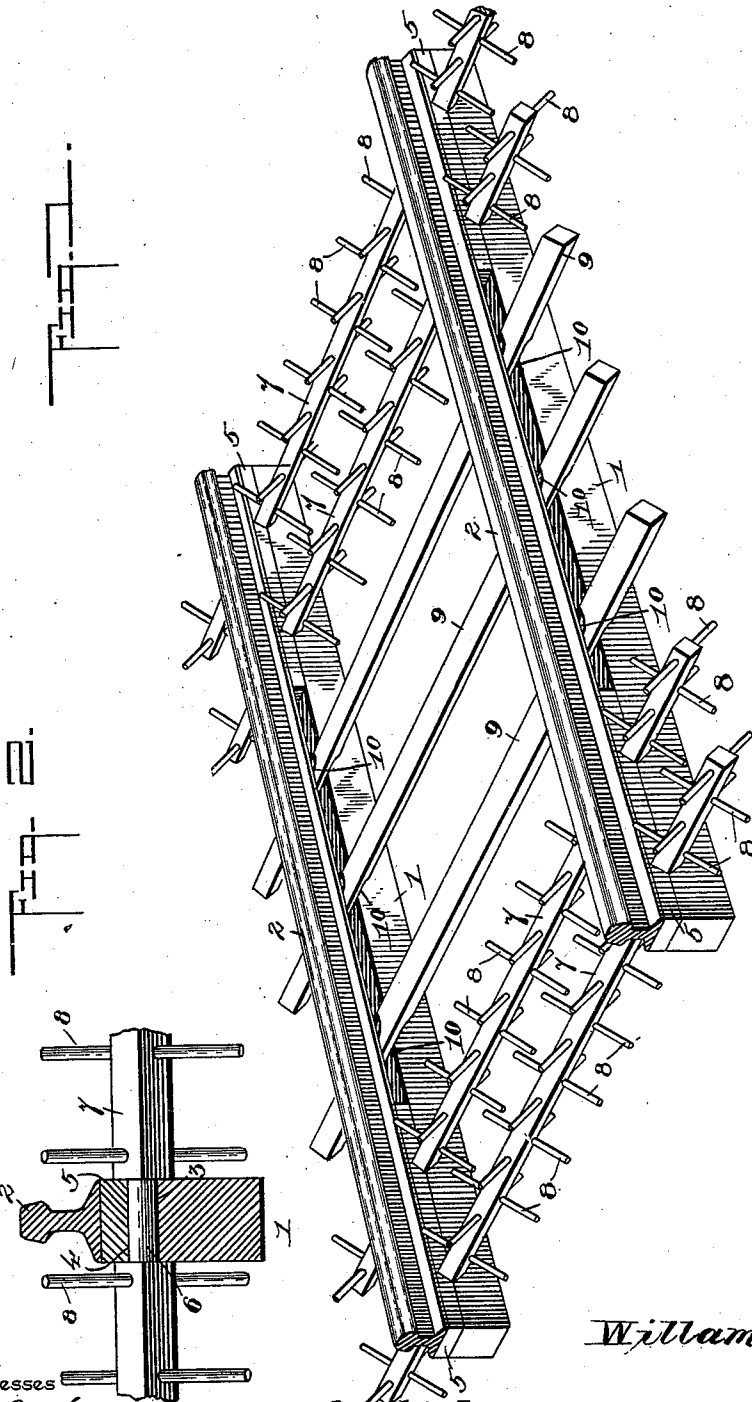


(No Model.)

W. B. NEVILL.
CATTLE GUARD.

No. 574,443.

Patented Jan. 5, 1897.



Witnesses

T. L. Macomber
[Signature]

By *His Attorneys,*

Inventor
William B. Nevill,

Cashnow & Co.

UNITED STATES PATENT OFFICE.

WILLAM BIRT NEVILL, OF ROCKWALL, TEXAS, ASSIGNOR OF ONE-HALF TO
R. P. BAKER, OF SAME PLACE.

CATTLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 574,443, dated January 5, 1897.

Application filed August 31, 1896. Serial No. 604,492. (No model.)

To all whom it may concern:

Be it known that I, WILLAM BIRT NEVILL, a citizen of the United States, residing at Rockwall, in the county of Rockwall and State of Texas, have invented a new and useful Cattle-Guard, of which the following is a specification.

My invention relates to railway cattle-guards, and has for its object to provide a simple, inexpensive, and efficient construction and arrangement of parts whereby cattle are prevented from traversing a railway-track in order to pass from one field or inclosure to another.

My invention relates to that class of cattle-guards in which spurred rollers are employed; and it consists, essentially, in the peculiar means employed for mounting the rollers or rotary ties, whereby they are adapted to perform the desired function without obstructing the track.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings, Figure 1 is a perspective view of a cattle-guard constructed in accordance with my invention. Fig. 2 is a detail transverse section of one of the stringers in the plane of the axis of a rotary tie or roller.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates longitudinal stringers arranged parallel with and beneath the rails 2, and near the extremities of said stringers are formed half-bearings 3, which combine, with corresponding inverted half-bearings 4 in cap bars or blocks 5, spaced between them and the rails, to receive the reduced portions or journals 6 of the cross-sectionally angular rotary ties or rollers 7. The rotary ties or rollers are preferably spurred, as shown at 8.

In addition to the spurred ties, which are arranged transversely to the road-bed at such a depth that the extremities of the spurs are approximately in the plane of the treads of the rails or do not extend thereabove, I employ fixed cross-sectionally angular ties 9, arranged between the contiguous ends of the cap bars or blocks 5 and interposed between

the rails and stringers. The cross-sectional diagonals of these fixed ties are arranged, respectively, in vertical and horizontal planes, whereby the angles project, respectively, in vertical and horizontal directions to avoid forming a horizontal footing for cattle, and the upper and lower angles are cut away or flattened in the planes of the rails and stringers, as shown at 10, to form suitable bearings for contact with said parts.

From the above description it will be seen that the arrangement of the ties, both rotary and fixed, between the stringers and rails and held in place thereby is simple and at the same time prevents the accidental displacement thereof. The weight of the rails serves to hold the parts properly in place without the use of complicated means of fastening.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

In a railway cattle-guard, the combination with the rails, of parallel stringers arranged below the rails, cap bars or blocks interposed between the stringers and rails contiguous to the extremities of the former, half-bearings being formed respectively in the contacting faces of the stringers and cap-bars, cross-sectionally angular spurred ties arranged transversely of the road-bed and having reduced journals mounted in said bearings, and fixed cross-sectionally angular ties arranged between the rails and stringers in the interval between the contiguous extremities of the cap-bars, said fixed ties being arranged with their cross-sectional diagonals in vertical and horizontal planes, and having their upper and lower angles cut away in the planes of the rails to bear respectively against the rails and stringers, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLAM BIRT NEVILL.

Witnesses:

W. D. AUSTIN,
R. A. SNEAD.