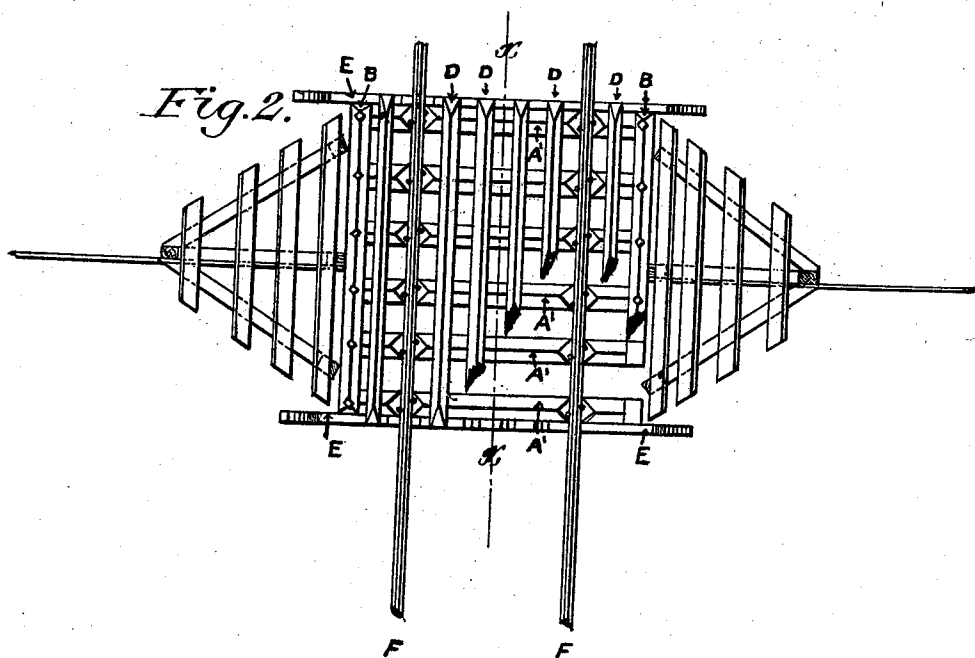
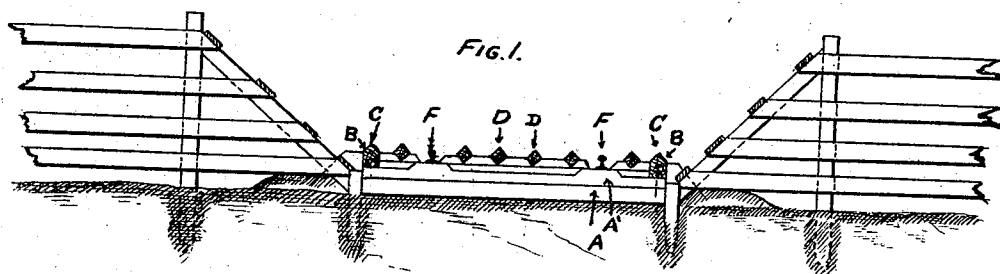


(No Model.)

M. L. LYNCH.
CATTLE GUARD.

No. 506,242.

Patented Oct. 10, 1893.



WITNESSES:

J. E. Coppage
Geo H. Kerk

Michael L. Lynch

INVENTOR

BY

Henry H. Kerr

ATTORNEY.

UNITED STATES PATENT OFFICE.

MICHAEL L. LYNCH, OF FORT WORTH, TEXAS.

CATTLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 506,242, dated October 10, 1893.

Application filed October 3, 1892. Serial No. 447,765. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL L. LYNCH, a citizen of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented a new and useful Cattle-Guard, of which the following is a specification, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to cattle guards for railway purposes, and is distinguished from other guards by the manner of combining the materials of which it is constructed and is illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section at right angles to the line of track. Fig. 2 is a top view. Fig. 3 is a cross section taken on line $x-x$ Fig. 2.

Similar letters refer to similar parts in the various views.

A shallow pit is first excavated the width of the roadway. Upon the floor of this pit are laid transversely to the line of track the cross or bridge ties A, A', in pairs, A' on top of A, the top tie A' of each pair being beveled to a sharp edge, as shown. At each end of these ties another tie B, is laid on top of ties A, A' to form a guard rail, and these also are beveled to a sharp edge as shown, on their upper surfaces. Ties B, B are shouldered over and drift bolted by bolts C, C to ties A, A, as shown. An end plank E, E, is securely spiked to the outer face of each of the two end pairs of ties A, A', the upper edge of

said end planks being cut into V shaped serrations properly spaced to receive the sharp edged rail pieces which are securely attached to them. These rail pieces D D D are set as shown in the V shaped serrations, cut in the upper faces of the end planks E E. In lieu of the ordinary cross or bridge ties A A', such ties may be specially prepared in one piece, out of timber, or hollow metal ties, A shaped with the sharp angle projecting upward may be used, the said metal tie to be filled with cement concrete introduced from the top, after the ties are laid in place, through the portions cut out to receive the track rails F F; also hollow iron A shaped intermediate rail pieces D D may be used, which may be laid on top of said A shaped metal ties in receptacles cut out of the top edge of said ties to receive them.

What I claim as new, and desire to secure by Letters Patent, is—

The combination in a railway cattle-guard of sharp edged cross ties, resting directly on the bottom of a shallow pit, and connected at their outer ends by guard rails shouldered over them and secured by bolts; end planks having V shaped serrations secured to the outer faces of the first and last tie, and projecting above them; and intermediate sharp-edged guard rails fitted into the serrations of said planks, substantially as set forth.

MICHAEL L. LYNCH.

Witnesses:

GEO. H. HOEGLE,
HENRY DICKSON.