No. 694,972. Patented Mar. 11, 1902.

V. S. KLICK.

RAILROAD CATTLE GUARD.

(Application filed Aug. 30, 1901.)

(No Model.)

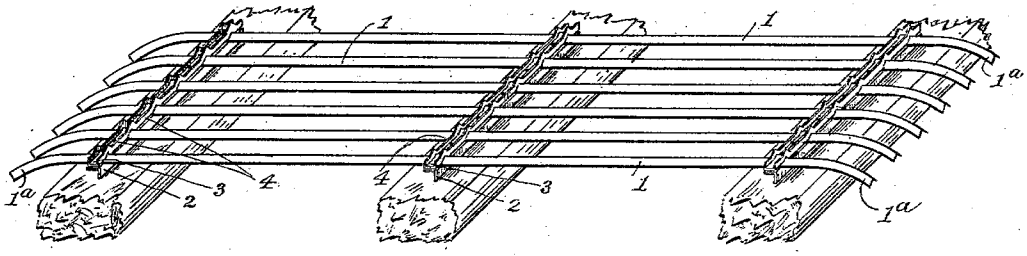


Fig. 1

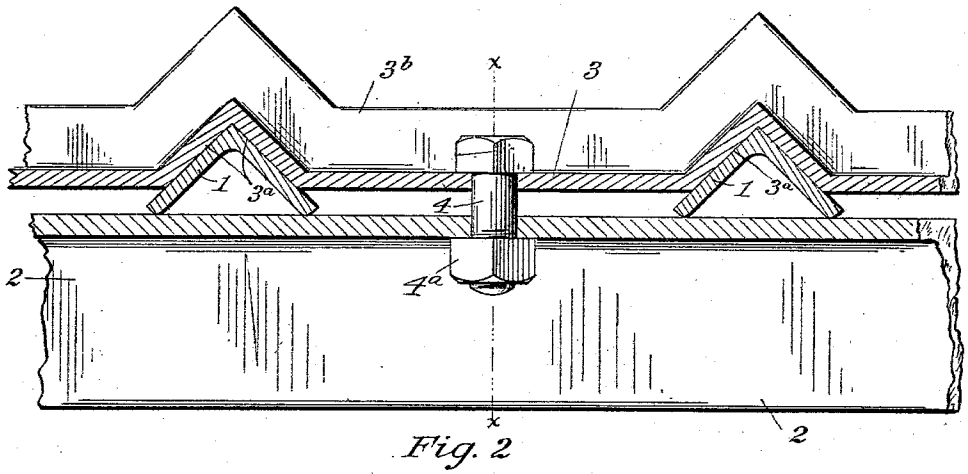


Fig. 2

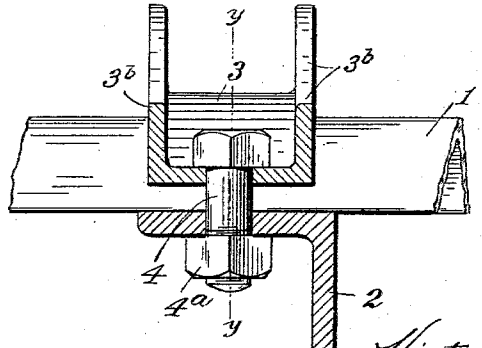


Fig. 3

Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

VICTOR S. KLICK, OF COLUMBUS, OHIO.

RAILROAD CATTLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 694,972, dated March 11, 1902.

Application filed August 30, 1901. Serial No. 73,768. (No model.)

To all whom it may concern:

Be it known that I, VICTOR S. KLICK, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Railroad Cattle-Guards; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates more particularly to guards for preventing animals from walking upon the railroad, thereby endangering the safety of trains running thereon.

The object of the invention is to provide such a guard of simple and economical construction that can be assembled chiefly out of standard material common upon the market.

The invention is pointed out in the claims appended hereto.

In the accompanying drawings, showing an embodiment of the invention, Figure 1 is a perspective view showing one section or unit, several of which will ordinarily be employed to form a complete guard. Fig. 2 is a sectional view on a larger scale than that of Fig. 1, taken on line *y y*, Fig. 3. Fig. 3 is a sectional view on line *x x* of Fig. 2.

The main structure of each section or unit is comprised of a series of parallelly-arranged angle-bars 1, of iron or steel. These bars can be bent or curved downward at their ends, as indicated at 1^a, Fig. 1. The bars 1 are arranged with their open sides down on a flat side or web of cross-bars 2, also preferably of angle-bar or steel.

3 designates a cap or clamping-piece formed with a series of angular recesses 3^a, that fit upon the corners of the angle-bars 1, and with strengthening-ribs 3^b. This piece 3 is a special casting, and the recesses therein are preferably made shallower than the perpendicular height of the angle-bars 1 when the latter are resting upon the cross-bars 2, so that there shall be a small space between the clamp 3 and the cross-bars 2.

The cap or clamping piece 3 is secured to the cross-bar 2 by means of one or more bolts 4, passed down through holes in the clamping-piece and the cross-bar, and a nut 4^a, turned tightly up against the under side of the web of the cross-bar. Because the recesses 3^a in the clamping-piece are made shallow, as described, the clamping-piece can be drawn tightly toward the bar 2, and the elasticity between the parts serves to bind the nut on the bolt.

As shown, one clamping-piece can be used to embrace all the longitudinal bars 1, and as many of the clamping-pieces as may be deemed necessary on each section or unit can be applied.

It will be observed that the structure thus described can be made up of standard material upon the market, except of course the cap or clamping pieces, which are special castings uniform for all sections and the several places on any section, and the parts can be put together without the aid of skilled labor or special machinery. Moreover, the parts can be shipped disconnected, thereby effecting a saving in cost of transportation.

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

1. A cattle-guard composed of a series of longitudinally-arranged angle-bars, cross-bars upon which said longitudinally-arranged bars rest, and a clamping-piece recessed to fit upon the longitudinally-arranged bars, and means securing the clamping-piece to the cross-bars, substantially as described.

2. A cattle-guard composed of a series of longitudinally-arranged angle-bars, cross-bars upon which said longitudinally-arranged bars rest, and a clamping-piece made with recesses shallower than the perpendicular depth of the longitudinally-arranged bars with means securing the clamping-piece, substantially as described.

3. In a cattle-guard comprising longitudinal and cross bars, a clamping-piece 3 to secure the longitudinal bars to the cross-bars, said clamping-piece having recesses 3^a and ribs 3^b, substantially as described.

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

VICTOR S. KLICK.

Witnesses:
GEO. W. ALFRED,
GEORGE M. FINCKEL.