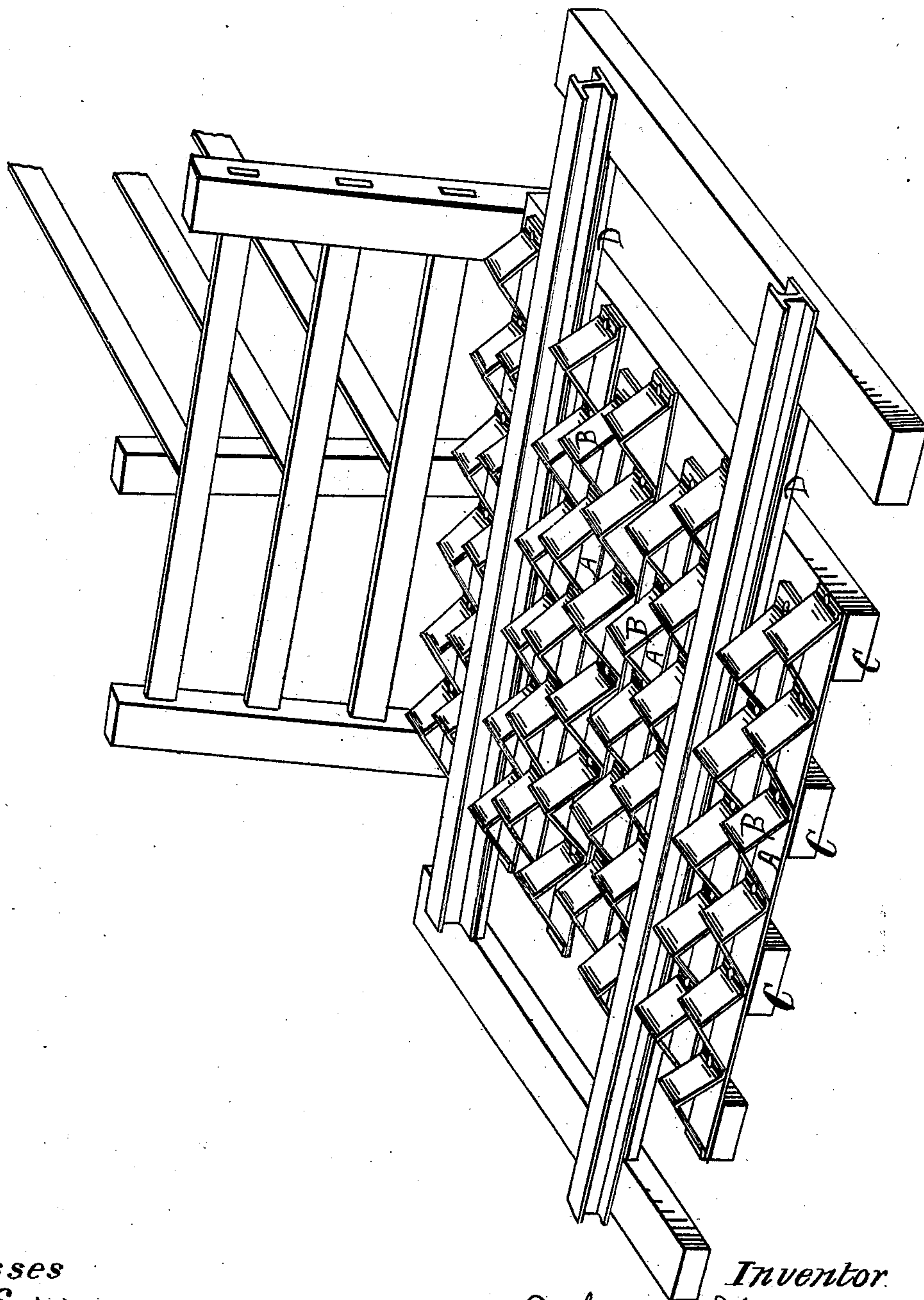


J. W. STREET.  
Railway Cattle-Guard.

No. 199,941.

Patented Feb. 5, 1878.



Witnesses  
W. R. Edlin.  
H. H. Bliss

Inventor.  
John W. Street  
by H. H. Bliss  
Attorney.



# UNITED STATES PATENT OFFICE.

JOHN W. STREET, OF CLEVELAND, OHIO.

## IMPROVEMENT IN RAILWAY CATTLE-GUARDS.

Specification forming part of Letters Patent No. **199,941**, dated February 5, 1878; application filed December 17, 1877.

*To all whom it may concern:*

Be it known that I, JOHN W. STREET, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Railway Cattle-Guards; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to letters of reference marked thereon, which form a part of this specification.

The object of my invention is to provide an efficient, cheap, and durable guard, to prevent cattle from running upon railroad-tracks at road-crossings and similar places, and, further, to construct a guard which can be easily removed and replaced when the track is to be repaired or other circumstances render such removal desirable.

To this end one part of the invention has reference to making the guard with a series of upwardly-projecting metallic points, spurs, or angular surfaces, which will not afford a practicable resting-place for the feet of cattle.

Another part of the invention relates to mounting such points or angular projections upon strips, bars, or slats of wood, which are secured to the ties which support the rails, whereby the handling of the guard is facilitated, and whereby, also, it is adapted for use with tracks of different width or gage.

Having thus set forth the nature of my invention, I will explain one method which I have adopted for carrying it into use.

In the drawing, which is a perspective view of my invention applied to a track, A A represent flat metal bars or plates of suitable width, say four or five inches, and one-eighth (more or less) of an inch in thickness. To the upper face of each bar is attached, by riveting or otherwise, a similar strip of metal bent into zigzag form, substantially as shown. By preference, I extend the bar A a short distance beyond one end of the zigzag strip.

The height of the apices or upper angles of the strip B above the bar A should be, under ordinary circumstances, six or seven inches,

and the ends of the bars may be punched to receive nails or spikes.

In using this guard I usually set the cross-ties C, over which it is to be placed, some three inches deeper than the adjacent ones, and then place between these sunken ties and the rails oak or other hard-wood planks D, three inches thick. I then secure to the deeply-set ties two guard-strips at each side of the track, outside of the rails, and a sufficient number between the rails to insure that there shall be no convenient stepping-place for cattle. This result will usually be accomplished by placing the strips, say, three inches apart, except that I prefer to place those next inside the rails about four and a half or five inches from the rails, to provide plenty of room for the car-wheels.

While I regard the construction shown as being the best for general use, yet I do not wish to be limited thereby; and many modifications might be employed without departing from the spirit of my invention—as, for instance, wood might be substituted for the metal bars A, and staples or teeth might be used in place of the zigzag strips B.

In putting down my guard I prefer that the position of each alternate strip should be reversed, in order that the points of each shall not be in line with the points of the next adjacent strips.

What I claim is—

1. A cattle-guard consisting of upwardly-projecting metallic points or angles attached to strips or bars, substantially as set forth.
2. A cattle-guard consisting of bars each having a zigzag metal strip attached thereto, substantially as set forth.
3. In a cattle-guard, the combination, with the metal points or projections, of the sunken ties C and longitudinal strips D, substantially as set forth.

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

JOHN W. STREET.

Witnesses:

S. T. LE BARON,  
C. C. STEVENS.