

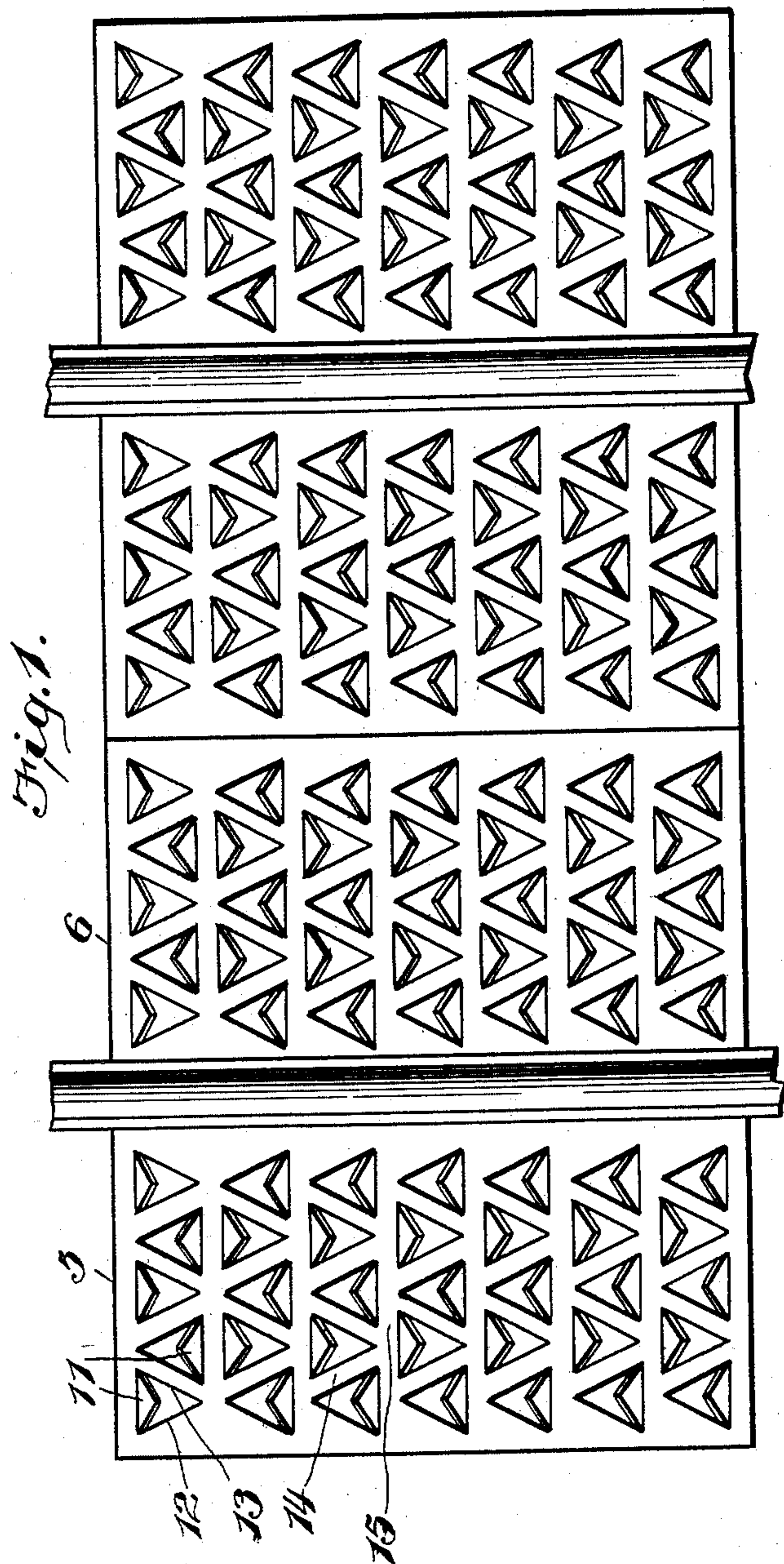
No. 719,509.

PATENTED FEB. 3, 1903.

I. RIMBEY.
CATTLE GUARD.

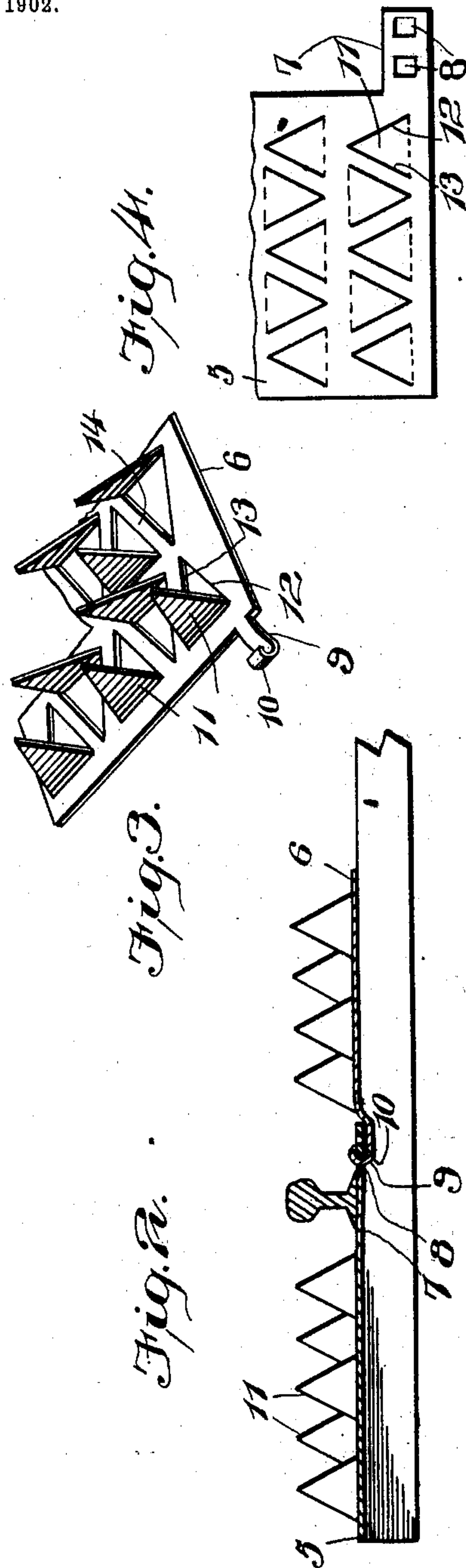
APPLICATION FILED JUNE 12, 1902.

NO MODEL.



Witnesses

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UNITED STATES PATENT OFFICE.

ISAIAH RIMBEY, OF DEERFIELD, MISSOURI.

CATTLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 719,509, dated February 3, 1903.

Application filed June 12, 1902. Serial No. 111,333. (No model.)

To all whom it may concern:

Be it known that I, ISAIAH RIMBEY, a citizen of the United States, residing at Deerfield, in the county of Vernon, State of Missouri, have invented certain new and useful Improvements in 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 to cattle-guards for railways; and it has for its object to provide a guard the parts of which may be each stamped from a single sheet of metal, so that it may be manufactured at a low cost, and in which the teeth will be arranged to render a passage over the guard extremely difficult, other objects and advantages of the invention being understood from the following description. In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a top plan view of a railway provided with the present cattle-guard. Fig. 2 is a transverse section of the railway and cattle-guard. Fig. 3 is a perspective view showing a portion of one of the plates of the cattle-guard and illustrating the formation of the plate. Fig. 4 is a plan view of a portion of one of the plates, showing the cuts formed therein prior to the bending up of the teeth.

Referring now to the drawings, the cattle-guard for a railway comprises two sections 5 and 6 for each rail, each section being in the form of a plate, having teeth formed thereon in the manner hereinafter described, and the section 5, which is disposed against one side of a rail and upon the ties, has tongues 7, which are passed beneath and project beyond the opposite face of the rail from the plate 5. The tongues 7 have transverse slots formed therein. The second plate 6 has also tongues 9, which project laterally from one edge and the ends of which tongues are bent into hook form, as shown at 10, and after each plate 5 has been disposed with its tongues passed beneath a rail the hooks 10 are engaged with the proper slots 8 of the corresponding tongues 7 and the plate 6 is lowered into position upon the ties between the rails. Thus each pair of plates lie one at each side of a rail. Each plate is provided with a plurality of trans-

verse series of triangular teeth 11. In the formation of the teeth a plurality of transverse series of cuts are made in the plate, the cuts being arranged in pairs 12 and 13, which pairs converge to a point alternately in opposite directions, and after the formation of these cuts, or in the same operation as the formation, the resultant triangular teeth are bent up so as to lie at acute angles to the upper face of the plate, the triangular teeth being connected to the plate at their bases, as shown. There is thus formed a number of transverse series of teeth, the teeth of each series lying in the same plane at an acute angle to the upper face of the plate, each series converging upwardly to the next series and the alternate series standing in parallel planes.

It will be noted upon reference to the drawings that the teeth of each series are separated by diagonal webs 14, while the different series of teeth are separated by continuous transverse webs 15, from which the diagonal webs extend, the transverse webs being connected at their ends by the uncut side portions of the plate, while the end series of diagonal webs connect with the end portions of the plate.

It will be noted that with the slanting arrangement of the teeth the passage across the guard is much less certain than if the teeth were vertical, while the formation of the plate is such that it may be made at a low cost, as it may be struck up at one blow in a press. Furthermore, a number of pairs of plates may be loaded upon a car and distributed at proper points along the trackway and may be easily and quickly adjusted to place by one man to fit either a single track or any number of tracks.

It will be understood that in practice modifications of the specific construction shown may be made and that any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

1. A cattle-guard comprising a pair of plates for each rail of a railway, one plate of each pair having tongues projecting laterally and adapted to engage beneath and project beyond a rail and each having spaced slots in its projecting portion, and the other plate of

each pair having laterally-projecting tongues at its corresponding edge, which latter are bent into hook form for engagement with the slots of the corresponding tongues of the first
5 plate interchangeably.

2. The combination with a railway, of a cattle-guard comprising plates disposed at opposite sides of each rail, said plates alining transversely of the railway, the plate at one side
10 of each rail having lateral tongues passed beneath the rail and provided with slots, and

the plate at the opposite side of the same rail having hooked lateral tongues pivotally engaged in slots of the first-named tongues, the hooks being removable to permit of applica- 15
tion and removal of the plates to each rail.

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

ISAIAH RIMBEY.

Witnesses:

F. L. SAMPLE,

N. A. TERPENING.