

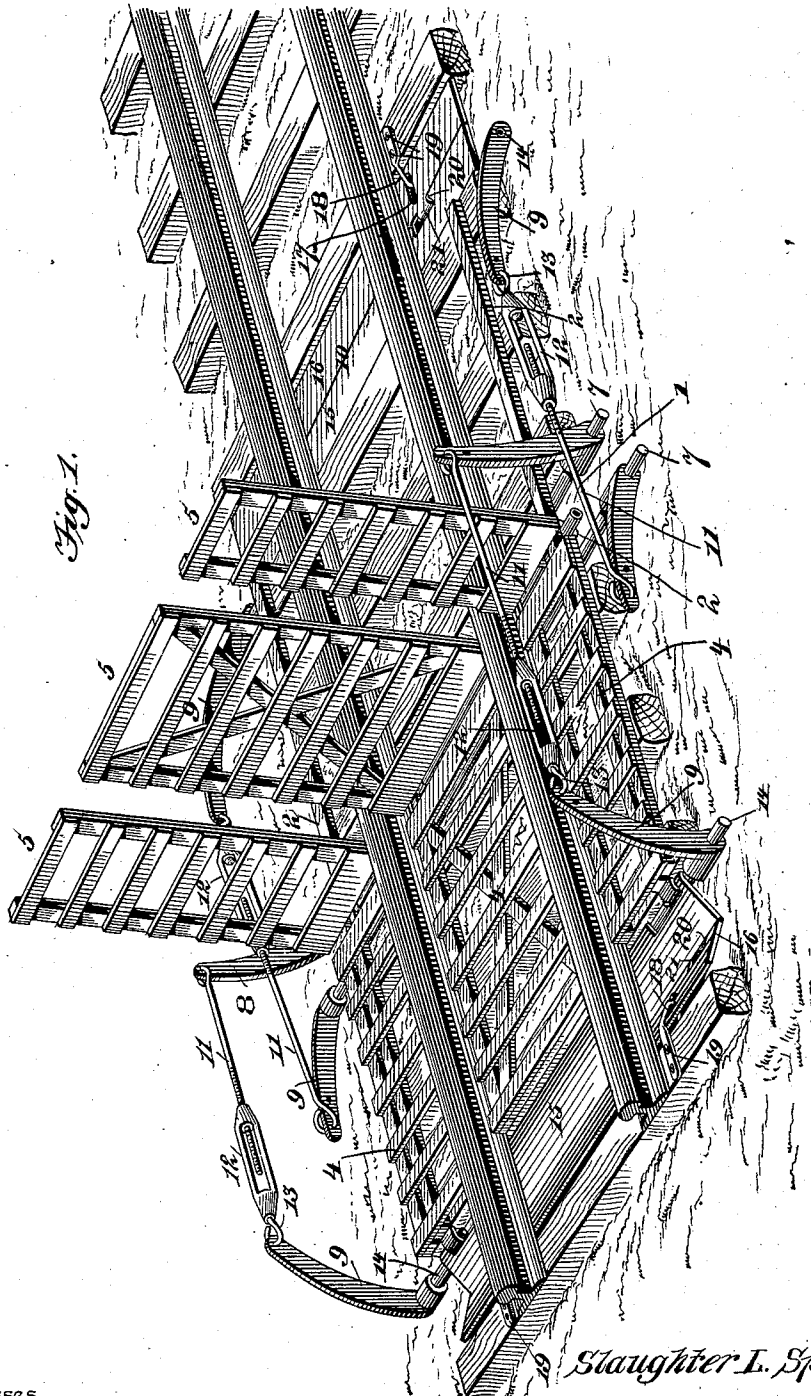
(No Model.)

2 Sheets—Sheet 1.

S. L. SPENCER.  
AUTOMATIC CATTLE GUARD.

No. 571,142.

Patented Nov. 10, 1896.



Inventor

Slaughter L. Spencer

Witnesses

H. S. Dieterich  
J. F. J. Riley

By his Attorneys.

Cashnow & Co.

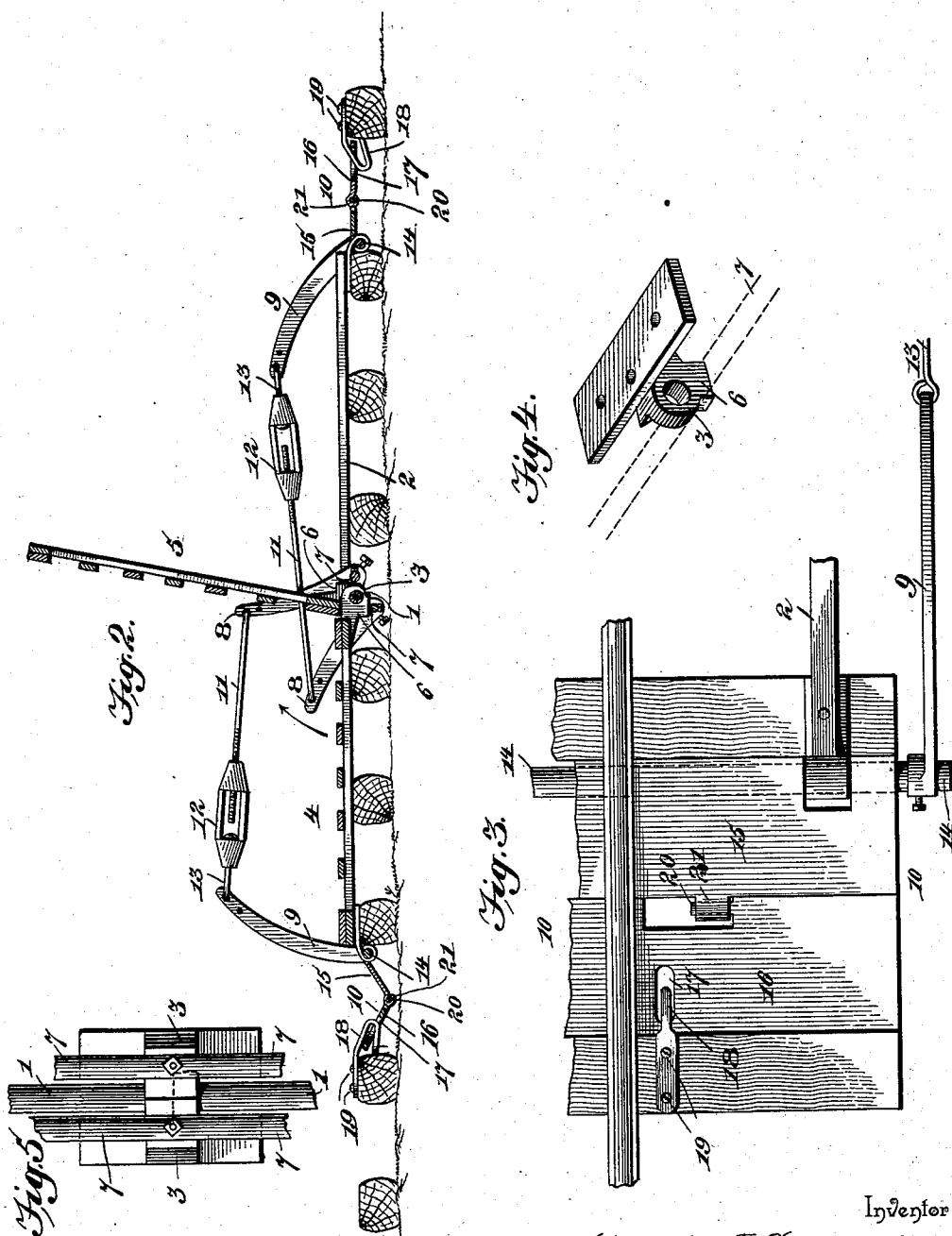
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By *his* Attorneys,

Chas. Knowlton.

# UNITED STATES PATENT OFFICE.

SLAUGHTER L. SPENCER, OF ROANOKE, VIRGINIA, ASSIGNOR OF ONE-HALF  
TO TIDAL A. TAYLOR, OF SAME PLACE.

## AUTOMATIC CATTLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 571,142, dated November 10, 1896.

Application filed July 31, 1896. Serial No. 601,268. (No model.)

*To all whom it may concern:*

Be it known that I, SLAUGHTER L. SPENCER, a citizen of the United States, residing at Roanoke, in the county of Roanoke and State of Virginia, have invented a new and useful Automatic Cattle-Guard, of which the following is a specification.

The invention relates to improvements in automatic cattle-guards.

The object of the present invention is to improve the construction of automatic cattle-guards for railways, and to provide a simple and comparatively inexpensive one which will possess strength and durability and which will effectually bar the passage of cattle and other animals and prevent the hoof of an animal from being caught when it is backing off the railway-guard.

A further object of the invention is to provide a cattle-guard which will not interfere with the repairing of a track and in which the parts may be readily adjusted to secure a proper operation of the device at all times.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of an automatic railway cattle-guard constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a plan view of a portion of one of the tilting platforms. Fig. 4 is a detail perspective view of one of the eyes of the gate-sections. Fig. 5 is a detail view illustrating the arrangement of the pintle-rod and the connecting-rods of the gate-sections.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a pintle-rod extending transversely of a track, located between two of the cross-ties thereof, and secured to a support 2, preferably consisting of bars which are disposed longitudinally of the track and secured to the upper faces of the cross-ties at the outer sides of the rails. The pintle-rod 1 receives eyes 3 of gate-sections 4 and 5, which

are located, respectively, between the rails and at the outer sides thereof, and which may be constructed in any suitable manner. The gate-sections form two gates adapted to swing upward in opposite directions to bar the passage of cattle and other animals to prevent them from crossing the track and thereby passing from one field or inclosure into another. Both gates are mounted on the same pintle-rod, and their eyes 3 are arranged in contiguous pairs, the eyes of each pair being recessed at their adjacent faces to enable them to fit snugly together.

The eyes 3 are provided with depending lugs 6, extending below the pintle-rod 1 and downwardly offsetting a pair of rods 7, which extend across the track and which connect the gate-sections and form two gates. The connecting-rods, which are bolted or otherwise secured to the lower faces of the depending lugs 6, extend from opposite sides of the track and carry inclined upwardly-extending arms 8, which diverge when the gates are open. The arms 8 are adjustably connected with inclined arms 9 of tilting platforms 10, which extend across the spaces between the ties at the ends of the device in position to be trod on and depressed by an animal attempting to walk along the track.

The adjustable connections between the inwardly-inclined arms 9 and the outwardly-inclined arms 8 consist of a rod 11, secured at one end to the arm 8 and having at its other end a turnbuckle 12, provided with a threaded opening for the reception of the threaded portion of the rod 11 and adjustably connected at its other end by a swivel 13 with the adjacent arm 9. By downwardly offsetting the connecting-rods 7 and by disposing the arms at an inclination, as shown, the weight of the gates, the connecting-rods, and the arms operate to close the gates after the pressure has been removed from the tilting platforms, and the position of the connecting-rods also enables them, in opening and closing, to clear the gates and the supports of the pintle-rod.

The arms 9 of each tilting platform are secured to the ends of a rock-shaft 14, journaled in suitable bearings at one side of a cross-tie

adjacent to the upper face thereof, and the tilting platform comprises a main section 15, which is fixed to the rock-shaft, and which is thereby hinged to the adjacent cross-tie, and a supplemental section 16, forming a horizontal continuation of the main section when the gates are open, and removably hinged to the adjacent edge of the main section. When the sections of the tilting platform are in a horizontal position, they extend across the entire space between the adjacent cross-ties, and when depressed by the hoof of an animal they are oppositely inclined, as clearly illustrated in Fig. 2 of the accompanying drawings, and prevent the hoof of an animal from being caught and enable it to slide its hoof backward freely after operating the tilting platform. The supplemental or auxiliary section 16 is provided adjacent to its outer edge with slots 17, and is supported by inclined loops 18, which are secured to the adjacent cross-tie by screws 19, and which are adapted to be readily removed to enable the supplemental section 16 to slide outward to disengage its pintles 20 from the eyes 21 of the main section.

When either of the tilting platforms is depressed, its arms 9 are swung outward, carrying with it the arms 8 of its respective gate, which is swung upward, and as soon as the pressure is removed from the depressed platform the gate will immediately drop back to a horizontal position upon the cross-ties. Should an animal avoid depressing the tilting platform with its front legs and reach the adjacent gate with the same, it cannot miss the tilting platform with its hind legs, so that the gate will be swung upward before it can pass over the device, and as the gates are independently operated and are entirely disconnected from each other an animal, by standing on one gate, cannot in the least interfere with the operation of the other gate.

It will be seen that the cattle-guard is positive and reliable in operation, and that the gates automatically open and close, that an animal is effectually barred from passing along the track, and that it is absolutely impossible for an animal to catch his hoof in the device.

It will also be apparent that the cattle-guard is exceedingly simple and inexpensive in construction, that it is adapted to be readily applied to railway-tracks, and that the adjustable connections between the arms of the gates and the platforms will enable the parts of the device to be properly set to secure the perfect operation of the device. It will also be apparent that no tools are required in adjusting the device, and that the cross-ties, upon which the device is mounted, may be readily removed or adjusted without materially interfering with it.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the principle or sac-

rificing any of the advantages of this invention.

What I claim is—

1. In a railway cattle-guard, the combination of a pintle-rod, a pair of gates composed of sections and arranged on the said pintle-rod, transversely-disposed rods connecting the sections of the gates and downwardly offset from the pintle-rod, arms carried by the connecting-rods, and tilting platforms connected with said arms, substantially as and for the purpose described.

2. In a railway cattle-guard, the combination of a transverse pintle-rod, a pair of upwardly-extending gates composed of sections and mounted on the said pintle-rod, transverse rods connecting the sections of the gates and downwardly offset from the pintle-rod, arms mounted on the connecting-rods, tilting platforms provided with arms and located at opposite sides of the gates, and adjustable connections between the said arms of the gates and the platforms, substantially as and for the purpose described.

3. In a railway cattle-guard, the combination of a transverse pintle-rod, a pair of independently-swinging gates mounted on the said pintle-rod and composed of sections, the downwardly-offset rods connecting the sections of the gates, the diverging arms mounted on the connecting-rods and inclined upward and outward, tilting platforms provided with inwardly-inclined upwardly-extending arms, and turnbuckle connections between the arms of the platforms and the arms of the connecting-rods, substantially as and for the purpose described.

4. In a railway cattle-guard, the combination of a transverse pintle-rod, the oppositely-disposed gate-sections provided with eyes mounted on the pintle-rod, said eyes having depending lugs extending below the pintle-rod, the transversely-disposed connecting-rods secured to the lugs of the eyes, arms mounted on the connecting-rods, and tilting platforms provided with arms connected with those of the connecting-rods, substantially as described.

5. In a railway cattle-guard, the combination of a gate, a tilting platform comprising two sections detachably hinged at their adjacent edges and extending entirely across the space between two cross-ties, one of the sections being provided, adjacent to its outer edge, with slots, loops mounted on the cross-ties and linked into the said slots and supporting the adjacent section, and connections between the other section and the gate, substantially as described.

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

SLAUGHTER L. SPENCER.

Witnesses:

J. H. BEAR,  
R. C. GISH.