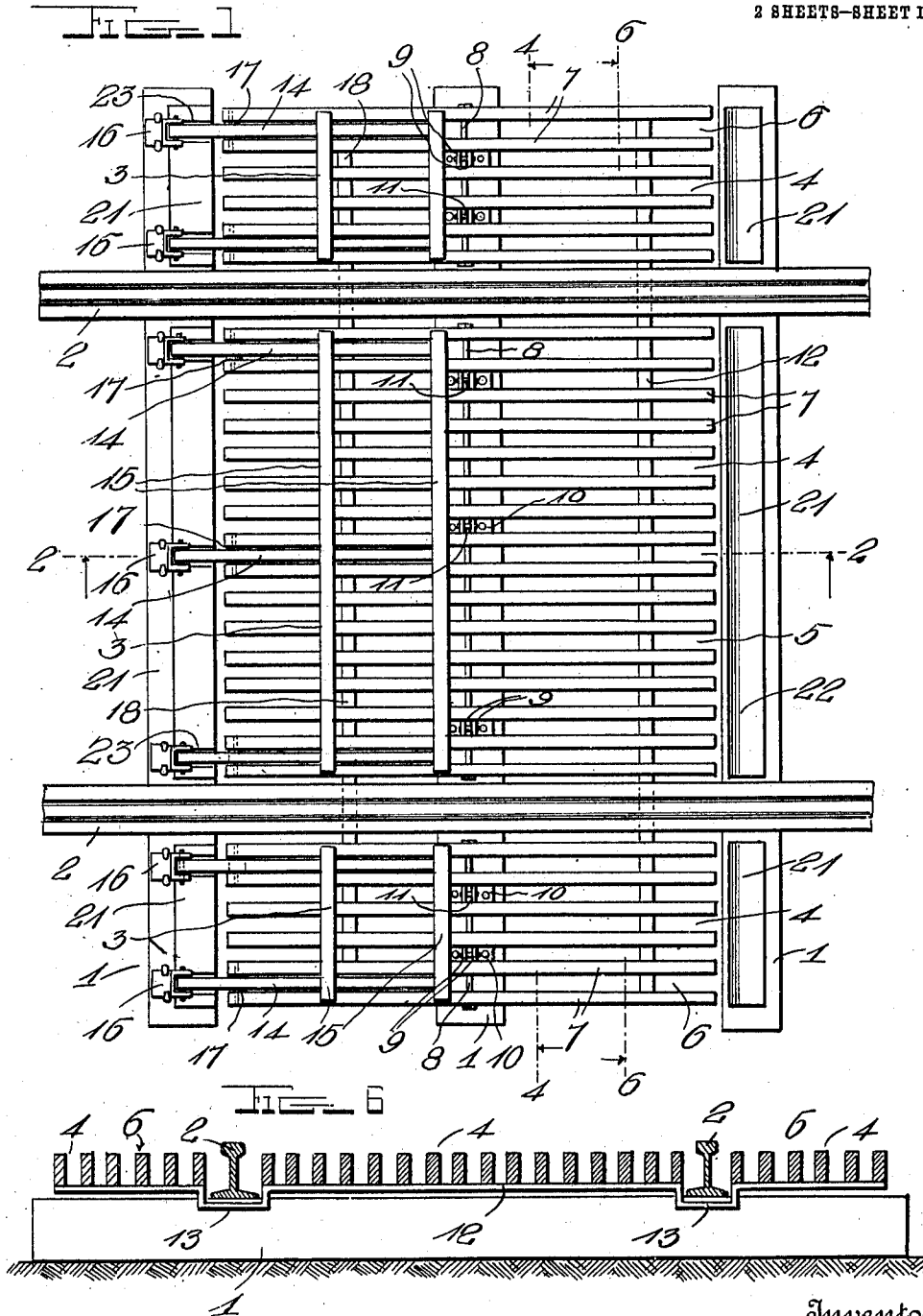


E. G. McCARSON & C. A. BEDELL.  
CATTLE GUARD FOR RAILWAYS.  
APPLICATION FILED JAN. 26, 1910.

978,319.

Patented Dec. 13, 1910.

2 SHEETS—SHEET 1.



Witnesses

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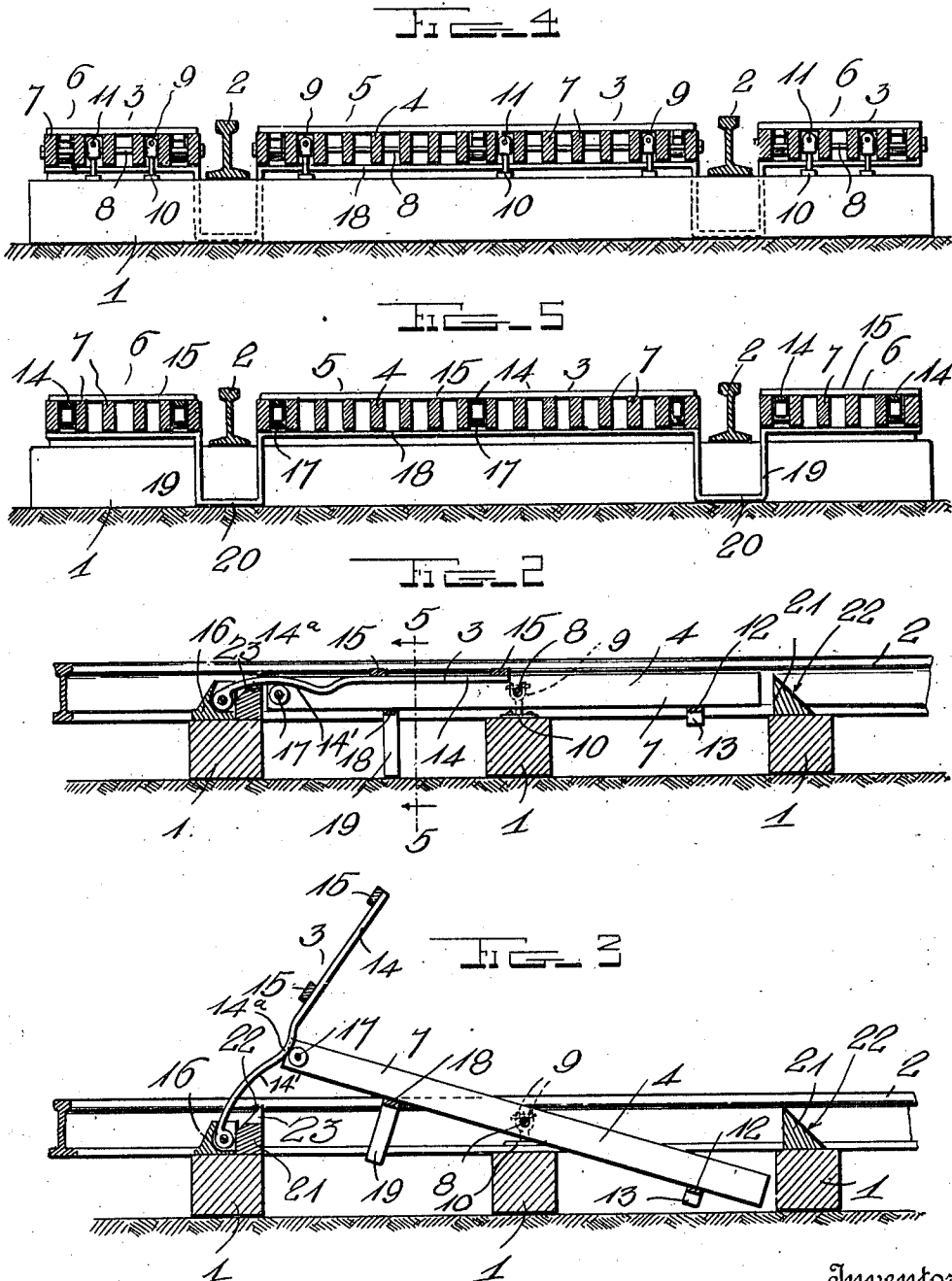
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2 SHEETS—SHEET 2.



Witnesses

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# UNITED STATES PATENT OFFICE.

EARNEST G. McCARSON AND CHARLES A. BEDELL, OF CHATTANOOGA, TENNESSEE.

CATTLE-GUARD FOR RAILWAYS.

978,319.

Specification of Letters Patent.

Patented Dec. 13, 1910.

Application filed January 26, 1910. Serial No. 540,728.

*To all whom it may concern:*

Be it known that we, EARNEST G. McCARSON and CHARLES A. BEDELL, citizens of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented certain new and useful Improvements in Cattle-Guards for Railways; and we do 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 improvements in cattle guards for railway tracks.

The invention consists in the construction and arrangement of parts, as will be hereinafter described and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a plan view of the cattle guard as applied to a section of the track. Fig. 2 is a longitudinal section taken on the line 2—2 of Fig. 1. Fig. 3 is a similar view with the guard members in raised position. Fig. 4 is a transverse section taken on the line 4—4 of Fig. 1. Fig. 5 is a transverse section taken on the line 5—5 of Fig. 2, and Fig. 6 is a similar view on the line 6—6 of Fig. 1.

Referring to the drawings for a more particular description of the invention, 1 indicates the cross ties of the track, 2 the rails, 3 the guard members of the cattle guard and 4 the platform sections. As shown in the drawings, the platform comprises three sections, namely, the central or main section 5, which is located between the track rails and the end sections 6 which are arranged at the outside of the rails. Each of the sections consists of a series of longitudinally-spaced strips 7 which are pivotally mounted upon the bearings rods 8 supported in the upper recessed or bifurcated ends 9, of the bearing brackets 10 which are suitably mounted upon one of the cross ties. Cotter pins 11 or other equivalent means are arranged through the recessed or bifurcated ends of the bearing brackets to hold the bearing rods in position. A flat connecting strip 12 is attached to the bottom edges of the strips of the platform sections and is provided near opposite ends with the downwardly bent U-shaped portions 13 which provide for the passage of said trip beneath the track rails and allows the desired swinging movement of the platform sections. By this construction it will be readily perceived that upon

stepping upon any one of the platform sections all of the sections will be actuated simultaneously and will, in turn, throw the guard members 3 into approximately upright position across the track, thus checking further progress of the cattle upon the track. The guard members comprise the strips 14 which extend longitudinally with relation to the track and the right angularly disposed strips 15 which extend transversely of the track, the rear or lower ends of said first mentioned strips being pivoted in the bearings 16 mounted upon one of the cross ties and held in position by spikes or other suitable means.

Revolubly mounted between the rear ends of certain of the strips 7 of the platform sections are the rollers 17, which work against the strips 14 of the guard members, and throw the latter into vertical position across the track when the platform sections are depressed.

We wish it to be understood that the swinging strips 14 are reversely curved on opposite sides, the curves 14' on one side of the strips serve to contact with the rollers 17, when the guard is arranged in a horizontal or being raised in a vertical position, the other curves 14<sup>a</sup> on the other sides of the strips are made cam shape so as to contact with said rollers 17 whereby the guard is elevated to a vertical position.

A connecting strip 18 is secured to the bottom edges of the strips 7 of the platform sections, at a point near the rear ends thereof, and is provided with the depending approximately U-shaped portions 19, which fit in the space between two of the adjacent cross ties when the platform sections are in lowered position. The upward swinging movement of the platform sections is approximately seven inches and under such conditions, the portions 19 of the strip 18 are made seven inches in length to allow the requisite swinging movement of the former. When the platform sections are released the cross strips or pieces 20 of the U-shaped portions 19 rest upon the track bed between the adjacent cross ties and support the platform sections in approximately horizontal position. Guard strips 21 of substantially triangular form in cross section are arranged upon two of the cross ties with their slanting sides 22 located at the outside so that any objects that may be dragged along the track will be carried up

over the guard, without any injury to the same.

If desired, suitable connections may be employed whereby the danger signal may be operated to warn the engineer of an approaching train when the cross pieces 20 of the connecting strip 18 engage the bottom of the track rails and complete the circuit between the rails.

10 What is claimed is:—

A cattle guard for railway tracks comprising bearing brackets arranged upon one of the cross ties, bearing rods arranged in said brackets, platform sections arranged between and on opposite sides of the track and pivotally mounted upon the bearing rods, strips connected to the platform sections provided with downwardly bent U-shaped portions which provide for the passage of said strips between the track rails so as to permit of a swinging movement of the platform sections, strips pivoted to the cross ties and arranged between certain of the platform sections having reversely ar-

ranged curves on opposite sides, rollers on certain of the platform sections, one set of said curves of the strips adapted to contact with said rollers when the platform is arranged in a horizontal position, the other set of said curves of the strips adapted to contact with the rollers when the platform sections are elevated, a strip secured to each of the bottoms of the platform sections at a point near the ends thereof, said strips having approximately U-shaped portions which are adapted to fit in the space between the ties and support the platform sections, and triangular shaped guard strips arranged upon the road bed adjacent to the platform sections.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

EARNEST G. McCARSON.  
CHARLES A. BEDELL.

Witnesses:

HENRY V. STEVENS,  
WILLIAM G. LUSK.