

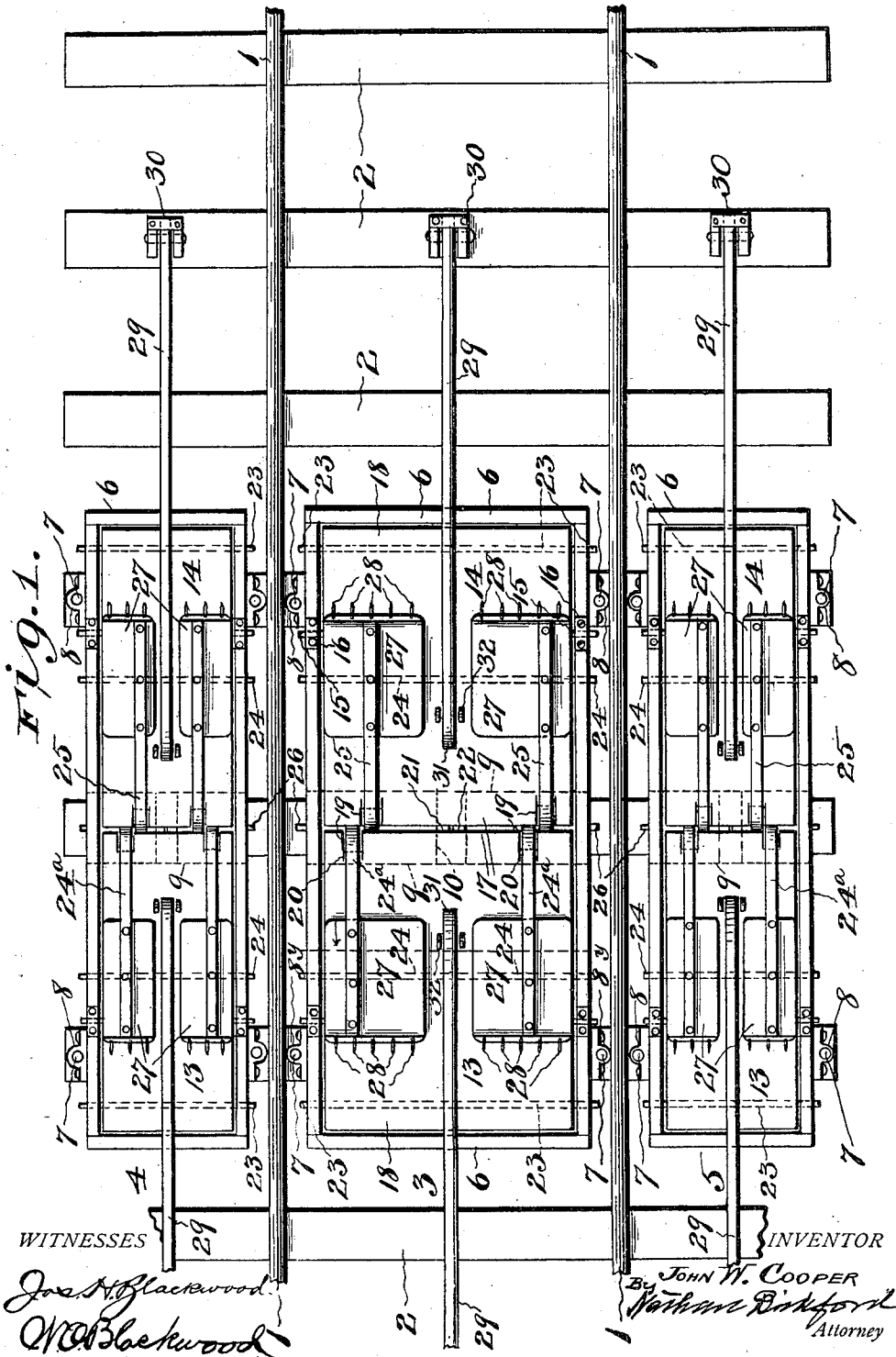
J. W. COOPER.
CATTLE GUARD.

APPLICATION FILED JULY 8, 1911.

Patented June 18, 1912.

3 SHEETS—SHEET 1.

1,029,854.



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Fig. 2.

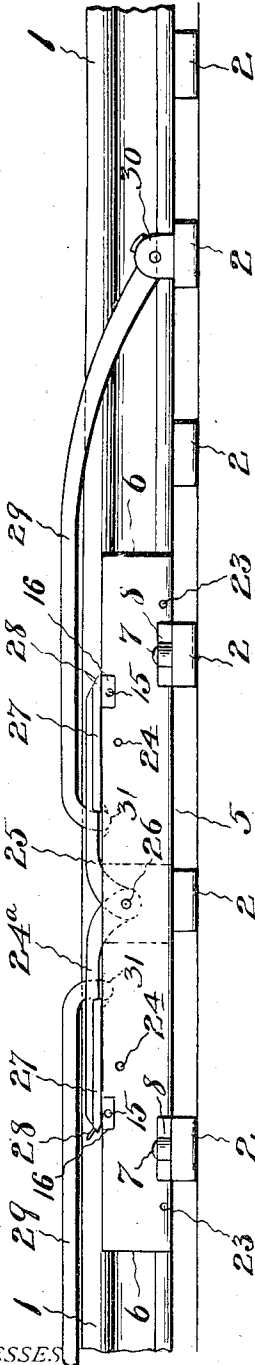
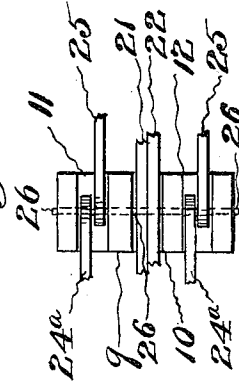
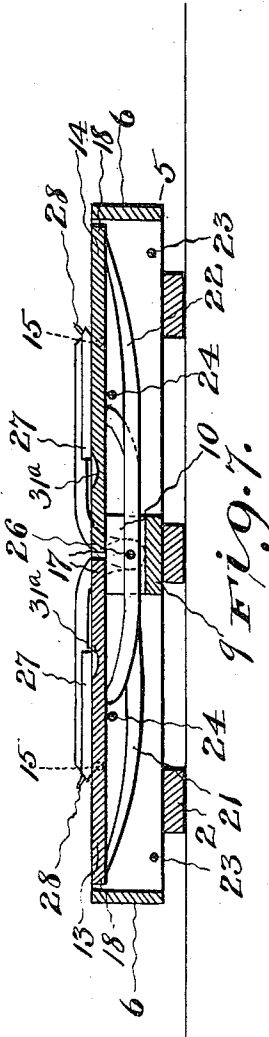


Fig. 3.



WITNESSES

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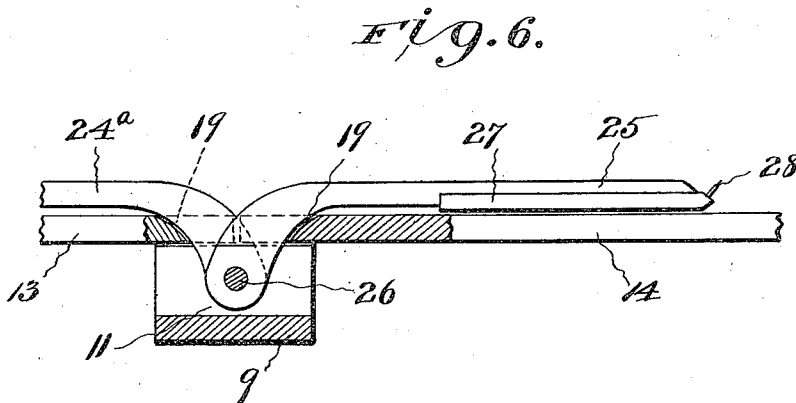
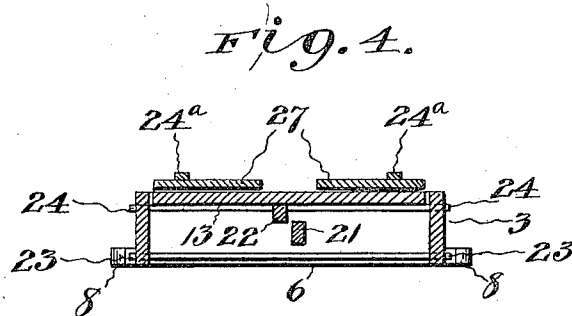
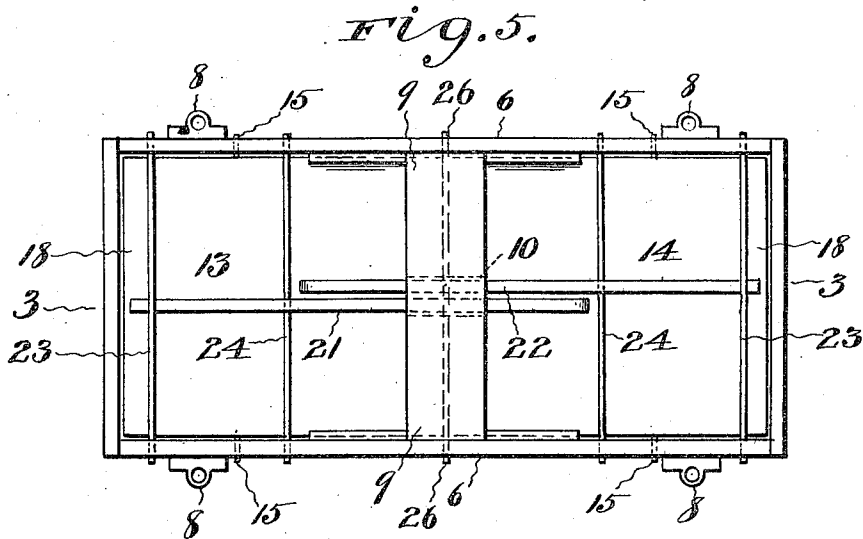
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WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN W. COOPER, OF BRINKLEY, ARKANSAS.

CATTLE-GUARD.

1,029,854.

Specification of Letters Patent.

Patented June 18, 1912.

Application filed July 8, 1911. Serial No. 637,562.

To all whom it may concern:

Be it known that I, JOHN W. COOPER, a citizen of the United States, residing at Brinkley, in the county of Monroe, State of Arkansas, have invented certain new and useful Improvements in Cattle-Guards; and I 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 pertains to make and use the same.

My invention relates to improvements in cattle guards for railroads and is designed for use at the abutting ends of a division fence, on the line of a railroad track, where a break in its continuity occurs to allow the passage of the railroad tracks and to prevent cattle or live stock from escaping up or down the track from one field or inclosure into another at the point where the said division fence intersects the track.

The invention consists in a cattle guard which is simple, inexpensive and durable in construction and effective and easy in operation and in the construction, combination and arrangement of the several parts as hereinafter more fully described and claimed.

Referring to the drawings: Figure 1 is top plan view. Fig. 2 a side view. Fig. 3 a longitudinal section. Fig. 4 a cross-section on the line *y-y* of Fig. 1. Fig. 5 a bottom plan view of middle section. Fig. 6 a detail view of one of the gates. Fig. 7 a detail view showing the mounting of the levers and arms.

In the drawings in which like reference characters designate corresponding parts in all the views, 1 represents the rails of a railroad track which are laid on cross-ties 2 in the usual manner.

The cattle guard comprises three sections 3, 4 and 5 which are a counterpart of each other except that the side sections 4 and 5 are made narrower than the middle section 3. Each section comprises a rectangular frame 6 designed to be secured to the cross-ties by means of spikes 7, which are driven through ears 8 into the said cross-ties, or other suitable securing device. A beam 9 extends across the frame 6 at its middle portion, and is provided in its upper face with a central recess 10 and side recesses 11 and 12.

Platforms 13 and 14 are pivotally supported in the frame 6, flush with the upper edges thereof, on journals 15, said journals

being mounted in bearings 16 in the side of the frame 6, said platforms having their inner ends 17 supported on top of beam 9, when in their normal positions, and their outer ends 18 being unsupported and adapted to be depressed. The inner ends 17 of the platforms are provided with notches 19 having downwardly beveled portions 20.

The platforms are operated by means of a pair of levers 21, 22 pivoted, side by side, in the central recess 10 of the beam 9, the outer ends of said levers extending nearly to the outer ends of the platforms and the inner ends terminating at points short of the journals of the said platforms. Rods 23 which extend across the frames 6, limit the downward movement of the outer ends of the levers 21 and 22 and the outer ends 18 of the platforms, and rods 24, which also extend across the frames, cooperate with the beams 9 in supporting the platforms. In each of the side recesses 11 and 12 of the beams 9 are pivoted side by side the inner ends of a pair of arms 24^a, 25 on a rod 26, the arms 24^a extending through the notches 19 in the platform 13 and the arms 25 extending through the notches 19 in the platform 14 and the ends of the arms 24^a and 25 being provided with gates 27, which normally rest on the top of the platforms, having a series of upwardly extending pointed barbs 28 on their outer ends. For the purpose of causing the return of the several parts of the cattle guard to their normal positions after being operated, curved spring metal bars 29 are provided which are adapted to be engaged by the cow-catcher of a locomotive and positively force said parts into their normal positions. The outer ends of the bars 29 are pivoted in bearings 30 on cross-ties beyond the ends of the frames and their inner ends 31 are curved downward and engage the platforms, at points 31^a inside their pivot points, and guards 32 are provided to keep the inner ends 31 in position on the platforms.

The cattle guard will be placed just below the rails of a railroad track about two inches from the top of the rails.

In operation when an animal steps on the outer end 18 of either of the platforms 13 or 14 the inner ends 17 of both platforms will be elevated, through the medium of the levers 21 and 22, and the gates 27 will be elevated by the inner ends 17 of the platforms

raising the arms on which the gates are mounted. The platforms and gates will be returned to their normal positions ordinarily by gravity, but if for any reason they should fail to return the contact of a locomotive with the pivoted spring arm 29 will cause it to bear down on the platforms and positively return the several parts to their normal positions.

- 10 I do not wish to be understood as limiting myself to the details of construction and arrangement as herein described and illustrated, as it is manifest that variations and modifications may be made in the features of construction and arrangement in the adaptation of the device to various conditions of use without departing from the spirit and scope of my invention and improvements. I therefore reserve the right to all such variations and modifications as properly fall within the scope of my invention and the terms of the following claims.

What I claim is:—

- 25 1. In a cattle guard, pivoted gates, and pivoted platforms arranged end to end and operatively connected together longitudinally, adapted to be elevated simultaneously by the depression of one of the platforms, substantially as described.
- 30 2. In a cattle guard pivoted gates and pivoted platforms arranged end to end and means for operatively connecting the platforms, said gates and one end of each of the platforms adapted to be elevated simultaneously by the depression of the end of one of the platforms, substantially as described.
- 35 3. In a cattle guard, pivoted gates and pivoted platforms below said gates and arranged end to end, said platforms and gates simultaneously operatable by the depression of the outer end of one of the platforms to elevate the inner ends of said platforms and the gates, substantially as described.
- 40 4. In a cattle guard, pivoted gates and pivoted platforms arranged end to end and means for causing the inner ends of said platforms to be elevated and the gates to be elevated by depressing the outer ends of one of said platforms, substantially as described.
- 45 5. In a cattle guard, pivoted gates, pivoted platforms and levers engaging the platforms for causing said platforms to operate

simultaneously by the depression of the outer end of either of said platforms to elevate the inner ends of the platforms and operate the gates, substantially as described. 55

6. In a cattle guard, pivoted gates, pivoted platforms and fulcrumed levers, the inner ends of said levers engaging the platforms at points on one side of their pivotal points, and the outer ends of said levers engaging the platforms at points on the opposite side of their pivotal points, substantially as described. 60

7. In a cattle guard, pivoted platforms arranged end to end having notches and pivoted gates having arms engaging said notches, and means operatively connecting said platforms longitudinally, substantially as described. 65 70

8. In a cattle guard, pivoted platforms operatively connected together longitudinally and pivoted gates having arms engaging the platforms, said platforms and gates simultaneously operatable by the depression of the outer end of said platforms, substantially as described. 75

9. In a cattle guard, pivoted gates, pivoted platforms and bars engaging said platforms designed to be operated and return said gates and platforms to their normal positions, substantially as described. 80

10. In a cattle guard, pivoted gates, pivoted platforms and means operatable by a locomotive for positively returning said gates and platforms to their normal positions, substantially as described. 85

11. In a cattle guard, pivoted gates, pivoted platforms and spring means engaging the platforms for positively returning said gates and platforms to their normal positions, substantially as described. 90

12. In a cattle guard, pivoted gates, pivoted platforms and spring arms engaging the platforms for positively returning said gates and platforms to their normal positions, substantially as described. 95

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

JOHN W. COOPER.

Witnesses:

R. M. HENDERSON,
L. C. OWENS.