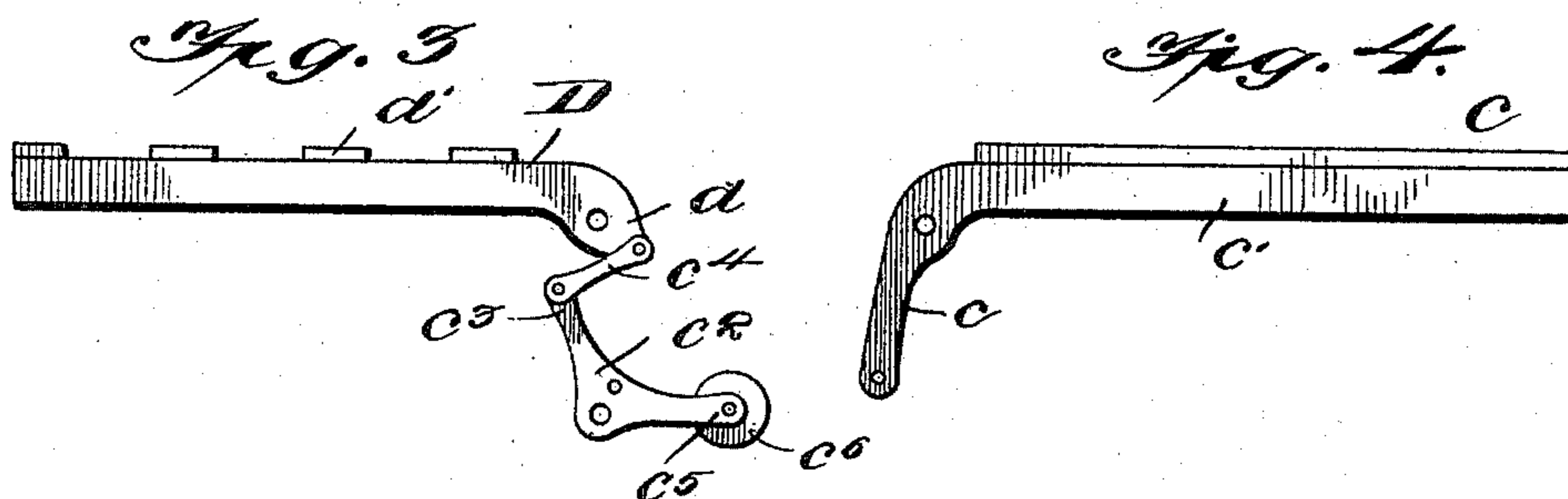
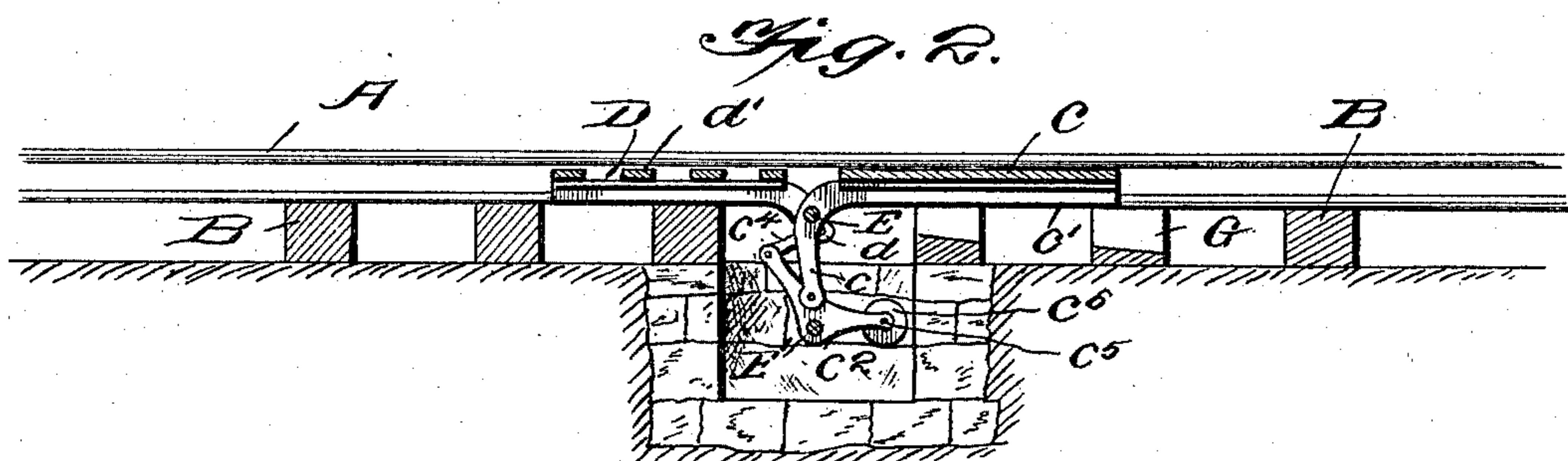
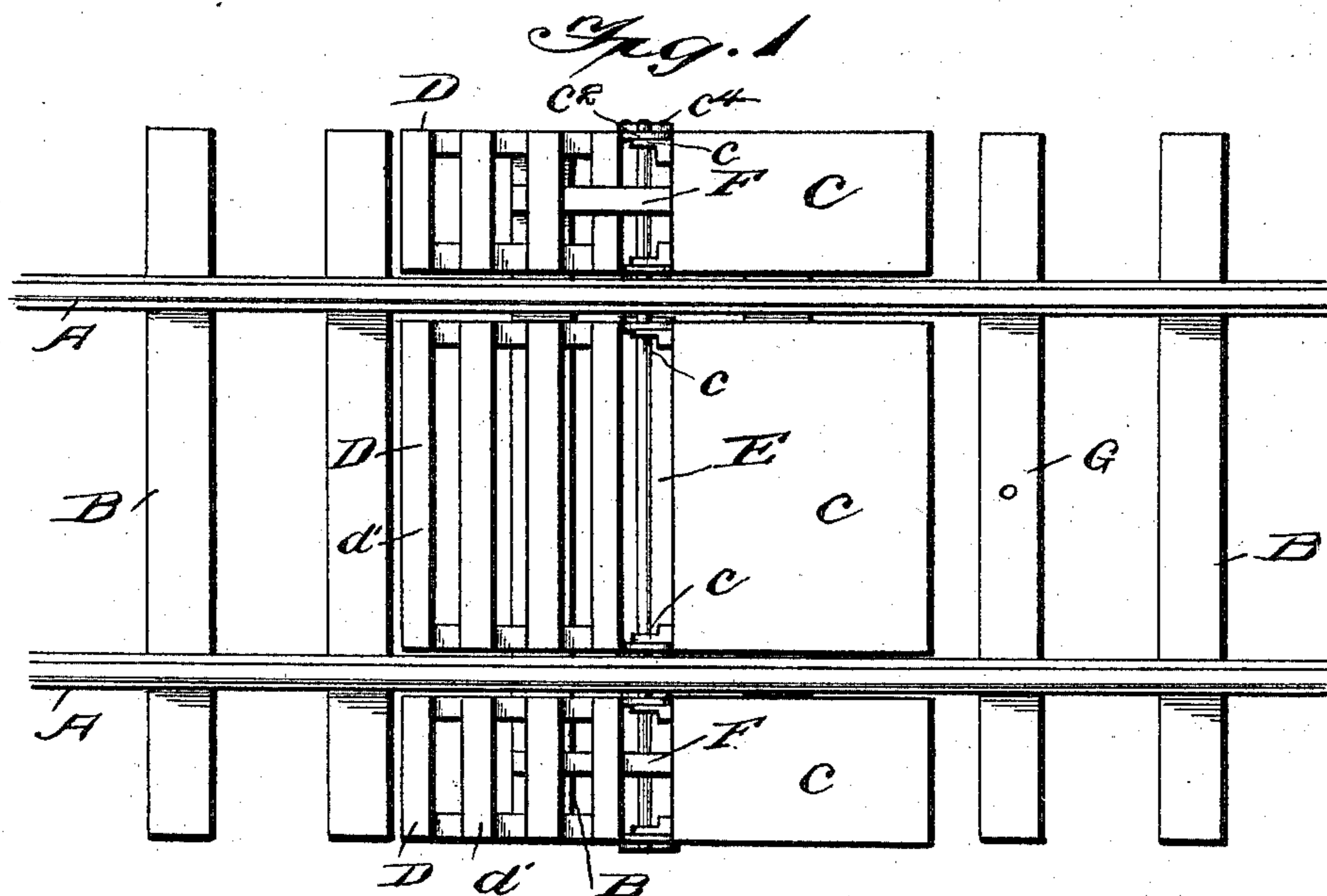


(No Model.)

A. HOWARD.
CATTLE GUARD.

No. 582,061.

Patented May 4, 1897.



WITNESSES

WITNESSES
 J. D. North.
 L. W. Stockbridge.

INVENTOR,

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UNITED STATES PATENT OFFICE.

ALMOND HOWARD, OF FIFIELD, WISCONSIN, ASSIGNOR OF ONE-THIRD TO
HARRIS COHEN AND ISADORE SMITH, OF SAME PLACE.

CATTLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 582,061, dated May 4, 1897.

Application filed November 9, 1896. Serial No. 611,523. (No model.)

To all whom it may concern:

Be it known that I, ALMOND HOWARD, a citizen of the United States, residing at Fifield, in the county of Price and State of Wisconsin, 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 improvements in railway-gates, and has more particular relation to gates intended as cattle-guards.

The invention consists of certain novel constructions, combinations, and arrangements of parts, all of which will be hereinafter more fully described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 represents a top plan view of a section of track with my improved gates applied thereto. Fig. 2 represents a central vertical section through the same. Fig. 3 represents a detail side elevation of one of the movable platforms and its pendent arms, and Fig. 4 represents a detail side elevation of one of the gates with its bell-crank lever and connecting-link.

A A in the drawings represent the rails; B B, the ties or stringers; C C C, the pivoted platforms, and D D D the movable gates. All of said platforms and gates C D respectively operate in substantially the same manner, and the description of one will therefore be the description of all. The said gates are placed, respectively, between the rails and to each side of the same, so as to prevent the passage of cattle along between the rails or in proximity to the sides of the same. The middle platform C is provided at one end with two pendent arms c , the upper portions of said arms being angular in formation and forming longitudinal braces c' for said platform. Each of said arms c is pivotally mounted upon a transverse shaft E, supported in brackets F, secured to the ties B. The lower ends of said arms c are pivotally connected to bell-crank levers c^2 , pivotally mounted upon another transverse shaft E', also mounted in said brackets F. The upper ends c^3 of said bell-crank levers are connected to projecting plates

d of the gates D by pivoted links c^4 . The outer ends c^5 of said bell-crank levers are provided with suitable weights c^6 , suspended therefrom, so that the upper ends of said levers will be forced normally forward. The said gate D comprises angular side bars d' and cross-bars d^2 , said side bars being provided with the aforesaid projecting plates d , which are journaled upon the transverse shaft E. The gates at the side of the track, as before explained, are similar to the gate between the tracks, with the one exception that only one of the pendent arms on the platform is used, as well as only one bell-crank lever and connection. A pivoted bar G is mounted to the rear of the platform C, so that it may be turned, when so desired, to force one or the other of its ends under said platform to prevent them descending when a weight is brought to bear upon them, and thus causing the gates to fly up.

It will be observed from the foregoing description that should cattle or any other animals passing along the tracks step upon any one of the platforms C the latter will be depressed, thereby raising the gate D connected thereto through the medium of the bell-crank lever. Immediately the weight is removed from said platform the gate descends to its normal position by means of the weight c^6 , attached to the outer end of the bell-crank lever.

If so desired, all of the bell-crank levers may be keyed to the shaft E', so that when any one of the platforms is depressed all of the gates will be raised simultaneously.

By the employment of my invention the passage of cattle along the tracks is absolutely prevented, as the moment one of the same steps upon one of the platforms his progress is immediately stopped by the elevation of the gate connected to said platform. When the platforms and gates are in their normal position they lie considerably below the surface of the rails and thus out of the way of any passing train.

Any cattle attempting to pass this gate will naturally be forced to walk to one side or the other, and thus be prevented from passing up the track, to the danger of the train.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a railway-gate, the combination with
5 a pivoted platform having a pendent arm, of
a pivoted gate, a pivoted bell-crank lever connected to the pendent arm, a link connecting
said gate and said bell-crank lever, whereby
any pressure upon the platform will raise said
10 gate into operative position, and a weight
connected to said bell-crank lever for returning the gate to its normal position, substantially as described.

2. In a railway-gate, the combination with
15 a transverse shaft, of a platform pivotally
mounted thereon, a gate also pivotally mounted on said shaft, a pivoted bell-crank lever,
and means for connecting said bell-crank
lever to the pivoted gate and the pivoted
20 platform, whereby upon the depression of the
latter the former is raised into operative position, substantially as described.

3. In a railway-gate, the combination with

a transverse shaft, of a platform pivotally
mounted thereon and provided with pendent 25
arms, a gate also pivotally mounted upon said
shaft, pivoted bell-crank levers connecting
said gate and said pendent arms respectively,
and weights also connected to said bell-crank
levers, substantially as described. 30

4. In a railway-gate, the combination with
a transverse shaft, of a platform pivoted on
the same and provided with pendent arms, a
gate also pivoted on said shaft, pivoted bell-
crank levers connected to said pendent arms, 35
pivoted links connecting said bell-crank
levers and said gate, and a weight attached
to said bell-crank levers, substantially as
described.

In testimony whereof I have signed this 40
specification in the presence of two subscribing witnesses.

ALMOND HOWARD.

Witnesses:

JOS. MANES,

GEO. W. HUBBELL.