

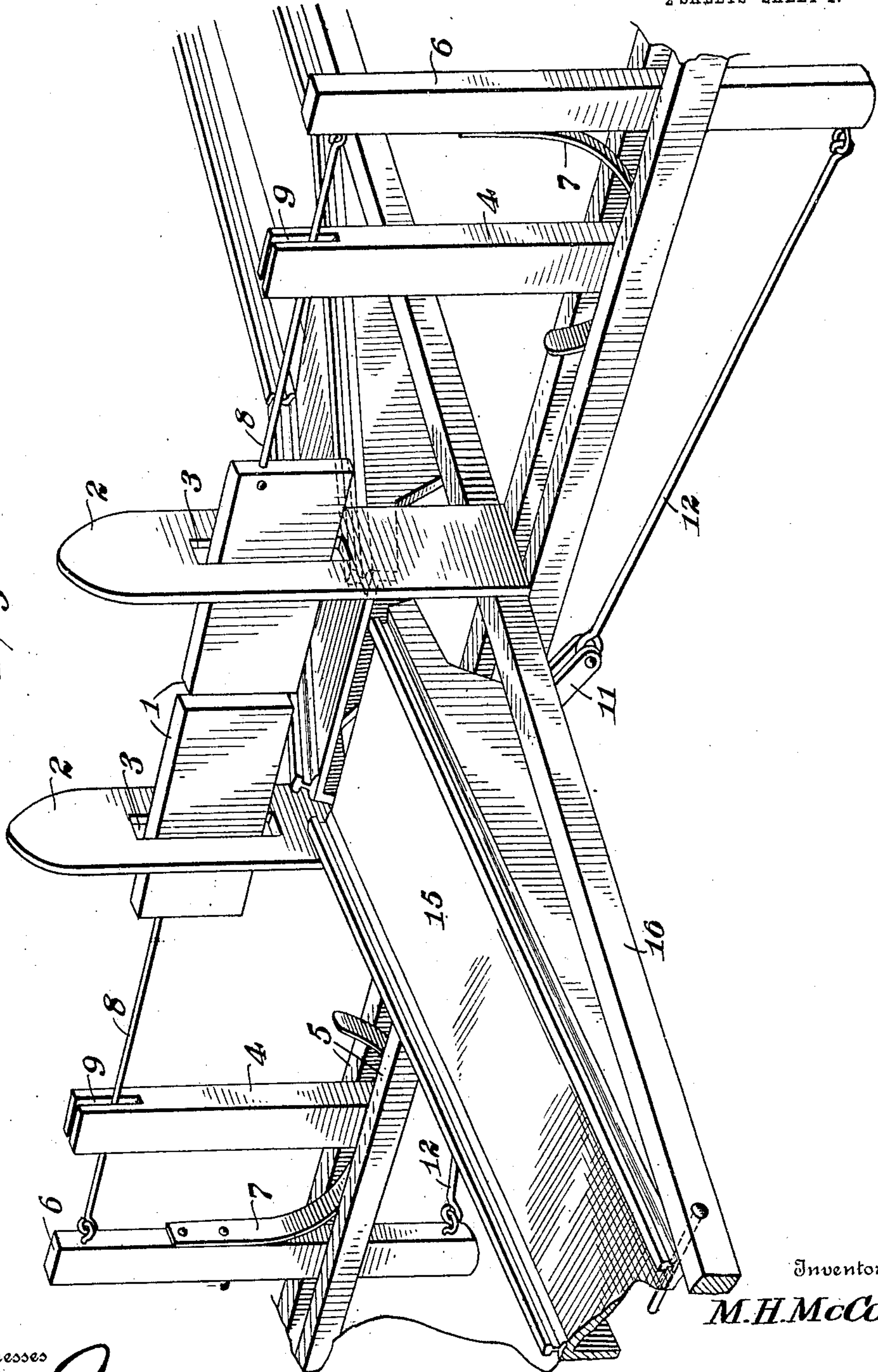
M. H. MCCOY.
 AUTOMATIC RAILWAY GATE.
 APPLICATION FILED NOV. 27, 1908.

916,580.

Patented Mar. 30, 1909.

2 SHEETS—SHEET 1.

Fig. 1.



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Fig. 2.

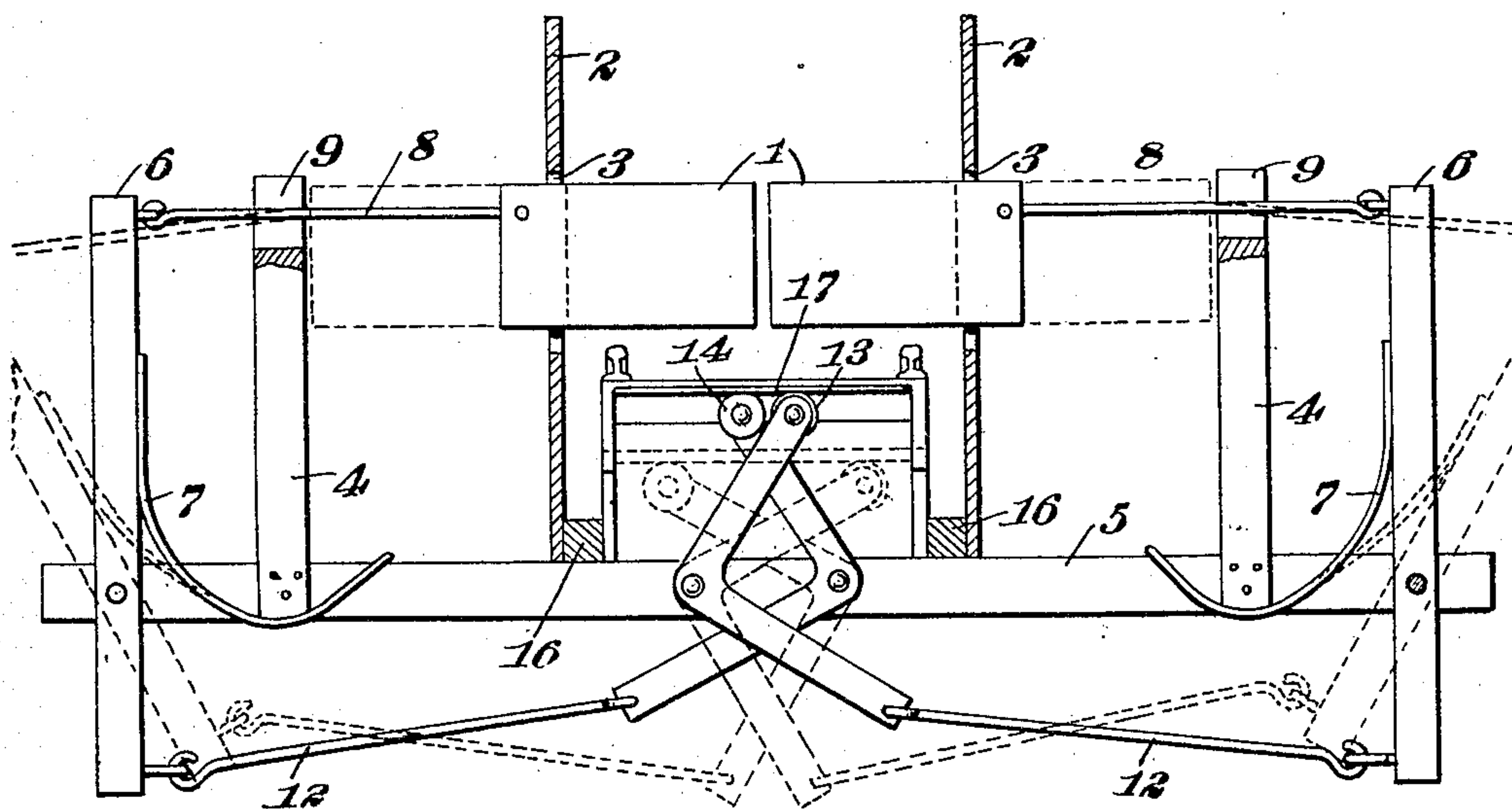
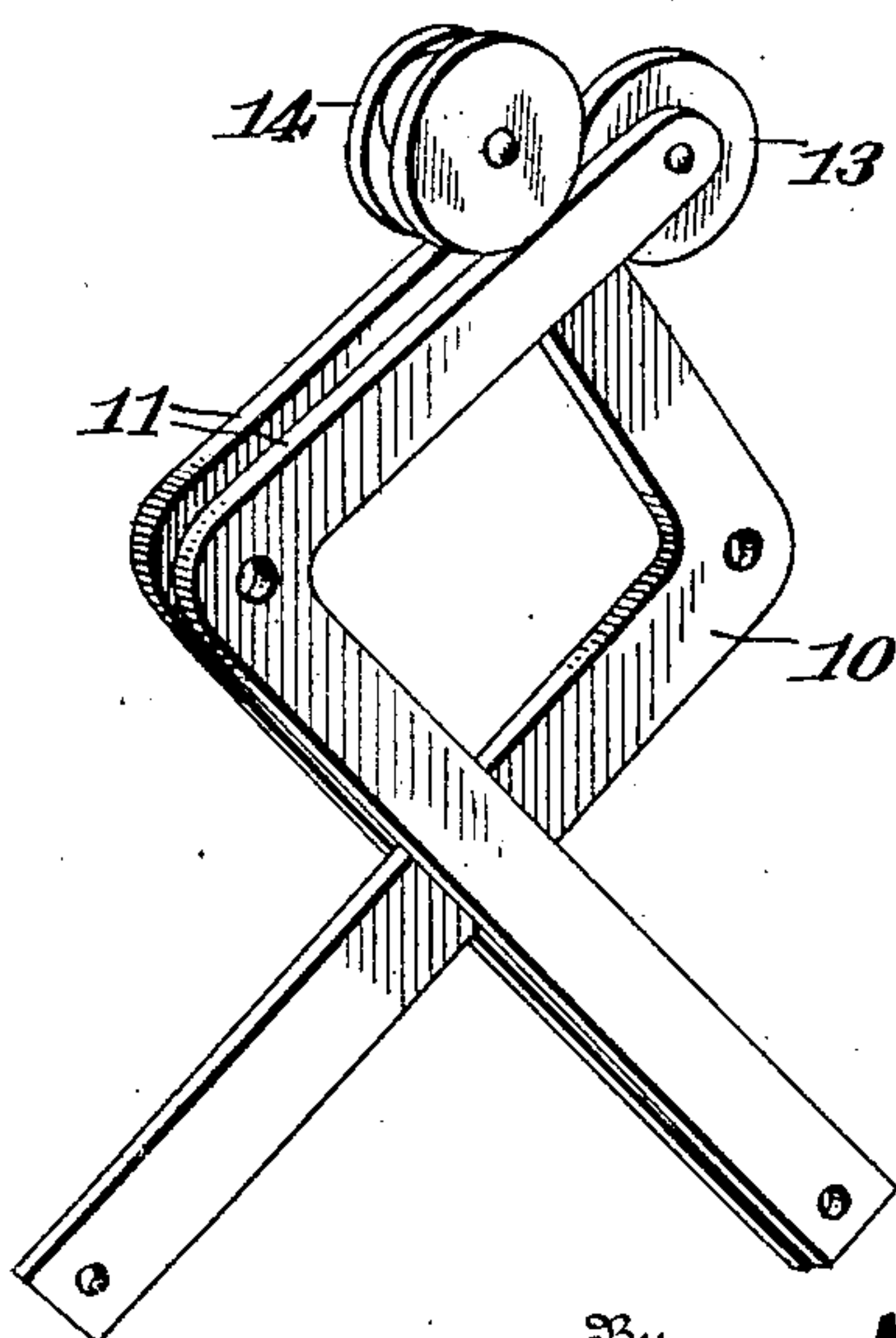


Fig. 3.



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UNITED STATES PATENT OFFICE.

MILES H. MCCOY, OF COSHOCTON, OHIO, ASSIGNOR OF ONE-HALF TO SAMUEL KIRKER, OF COSHOCTON, OHIO.

AUTOMATIC RAILWAY-GATE.

No. 916,580.

Specification of Letters Patent.

Patented March 30, 1909.

Application filed November 27, 1908. Serial No. 464,563.

To all whom it may concern:

Be it known that I, MILES H. MCCOY, a citizen of the United States, residing at Coshocton, in the county of Coshocton and State of Ohio, have invented certain new and useful Improvements in Automatic Railway-Gates, of which the following is a specification.

The present invention has for its object to devise a novel gate adapted to be automatically actuated by the approach of a train so as to be opened, and to close automatically after the train has passed by the gate, thereby preventing stock from leaving an inclosure or other place in which they may be corralled.

With this and other objects in view that will more fully appear as the description proceeds, the invention consists in certain constructions and arrangements of the parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention and the merits thereof, and to acquire a knowledge of the details of construction, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of a railway gate embodying the invention; Fig. 2 is a cross section thereof parallel with the gate and at a right angle to the length of the track; and, Fig. 3 is a detail perspective view of the bell cranks.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

It is preferred to provide the gate in two sections or leaves 1, and to mount the same for sliding movement. A post 2 is erected at the right side of the track, and forms a support for a section or leaf 1 of the gate, said post having a slot 3 in which the gate section 1 is mounted. A second post 4 is located some distance from the post 2 and acts jointly therewith to support a section of the gate in its movements. One post 4 is located at each side of the track at a suitable distance from the post 2. Parallel timbers 5 extend beneath the track and at a right angle thereto, and project to a like distance from opposite sides thereof and support the posts 2 and 4 and the gate-actuating means. The timbers 5 may be of wood or metal, and

are spaced apart a distance to receive the posts 4 and the gate-operating levers 6, the latter having a vertical arrangement and being pivotally connected to the end portions of the timbers 5. A spring 7 coöperates with each lever 6, to hold its upper end pressed inward to maintain the gate in closed position under normal conditions. The springs 7 may be of any construction, and their upper ends are secured to the inner upper portions of the levers 6, and their lower portions curve inward and upward and engage the lower ends of the posts 4, the parts being arranged so that the springs 7 exert an inward pull upon the upper ends of the levers 6. A rod 8 connects the upper end of each of the levers 6 with the adjacent gate section, and is mounted in a slot 9 formed in the upper end of the respective posts 4. Bell cranks 10 and 11 are located immediately below the track and are pivotally supported by the timbers 5. The lower members of the cranks are connected by rods 12 with the lower ends of the respective gate-operating levers 6. The upper members of the bell cranks overlap and are adapted to be depressed when subjected to vertical pressure from above, so as to draw the lower ends of the levers 6 inward and cause their upper ends to correspondingly move outward and open the gate 5, separating the sections or leaves 1. The bell crank 11 is composed of corresponding members which are spaced apart to receive the bell crank 10 which is formed of a single part. The extremities of the upper members of the bell cranks are provided with rollers 13 and 14 which are adapted to engage with the under side of the movable track sections so as to offer a minimum amount of resistance to the movement of said track sections when depressed. The roller 13 is arranged to bear against one edge of the bell crank 10, and is mounted between the members of the bell crank 11. The upper member of the bell crank 10 is provided with a pair of rollers 14 which are adapted to engage the adjacent edges of the upper members of the bell crank 11. By arranging the bell cranks and rollers in a manner substantially as herein disclosed, both bell cranks receive a like movement, and the sections or leaves 1 of the gate are moved outward alike, thereby preventing a train from coming in contact with either section or leaf 1.

The track is provided upon each side of the gate with a movable section 15 which is pivoted at the end remote from the gate and normally raised at the end adjacent to the gate. The movable track sections 15 are mounted upon a frame comprising longitudinal timbers 16 which are secured to the transverse timbers 5 and are arranged upon opposite sides of the track, so as to receive the movable sections 15 and prevent lateral displacement thereof. Wear irons 17 are fitted to the under sides of the adjacent ends of the track sections 15 and rest upon the rollers 13 and 14. The movable or pivoted track sections 15 terminate about in the plane of the gate, and as their inner ends are depressed by the weight of the engine passing thereover, the bell cranks 10 and 11 are operated and move the levers 6 so as to separate the sections or leaves 1 comprising the gate, thereby opening the latter and providing a clear passage for the train. After the train passes by the gate and clears the movable track section on the inner side of the gate, the latter automatically closes by the action of the springs 7 in the manner stated.

It is to be understood that the movable sections 15 may be arranged to come between the rails of the main track, so that upon the approach of a train, the flanges or tread portions of the car wheels may engage with and depress the sections 15 and operate the gate in the manner set forth. In this adaptation, the main rails are continuous, the parts 15 being devoid of rail sections forming a continuation of the track rails.

Having thus described the invention, what I claim is:

1. In a railway gate the combination of a movable track section, a gate mounted to normally extend over the track, a vertically arranged lever at one side of the track, means connecting the upper end of said lever with the gate, a bell crank arranged beneath the movable track section and having the latter supported upon the upright member of said

bell crank, which is normally inclined to the perpendicular, and means connecting the approximately horizontal member of the bell crank with the lower end of said vertically arranged lever.

2. In a railway gate the combination of a movable track section, a gate comprising two leaves arranged to normally extend over the track, oppositely disposed bell cranks located beneath the movable track section and supporting the latter upon their upright members, which normally incline to the perpendicular in opposite directions, and connecting means between the approximately horizontal members of the bell cranks and the aforesaid leaves to effect an opening and a closing of the gate.

3. In combination, cooperating movable track sections, a gate arranged to normally extend over the track, and actuating means for the gate comprising companion bell cranks, the one consisting of a single part and the other comprising two like parts spaced to receive between them the single bell crank.

4. In combination a movable track section, a gate comprising leaves normally extended over the track, oppositely disposed bell cranks arranged beneath the movable track section and supporting the latter upon their upright members which are oppositely inclined to the vertical, vertical levers located upon opposite sides of the track and having their upper ends connected with the respective leaves, springs cooperating with said levers to both hold the gate closed and the movable track section elevated, and connecting means between the approximately horizontal members of the bell cranks and the lower ends of said vertical levers.

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

MILES H. McCOY. [L. S.]

Witnesses:

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MARY M. HUNT.