

(No Model.)

H. R. VORDERMARK.
TRACK GATE FOR RAILWAYS.

No. 270,707.

Patented Jan. 16, 1883.

Fig. 1.

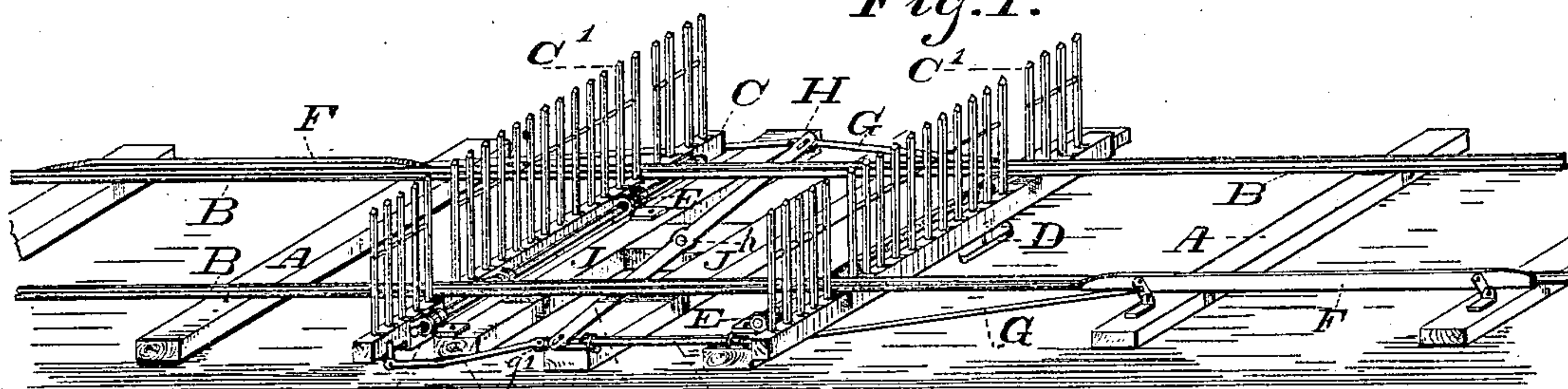


Fig. 2.

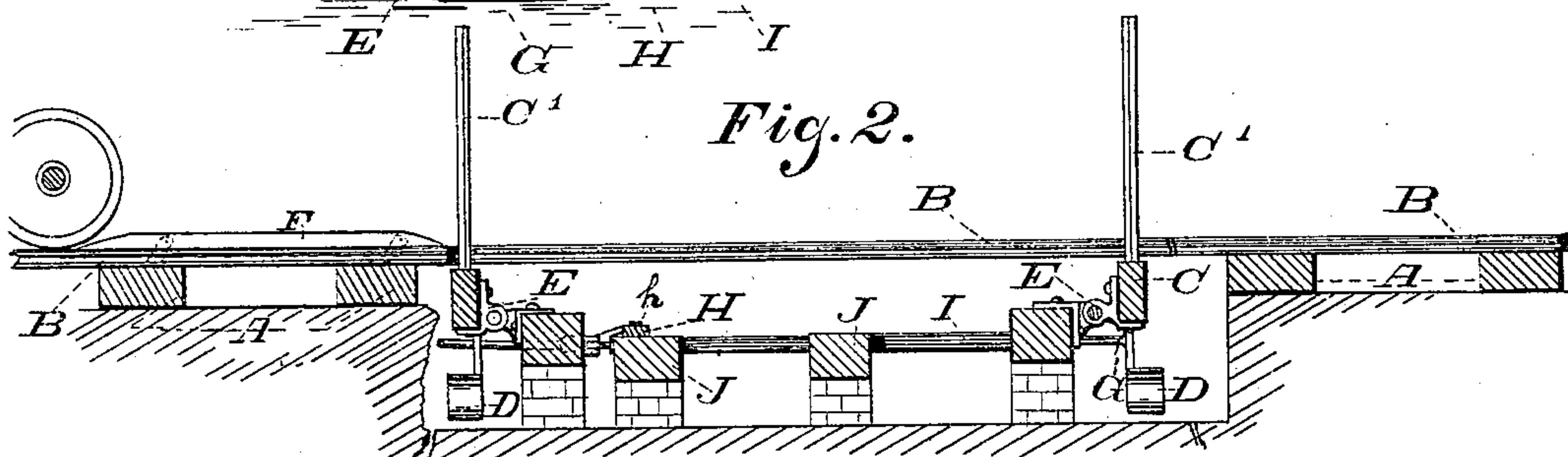


Fig. 3.

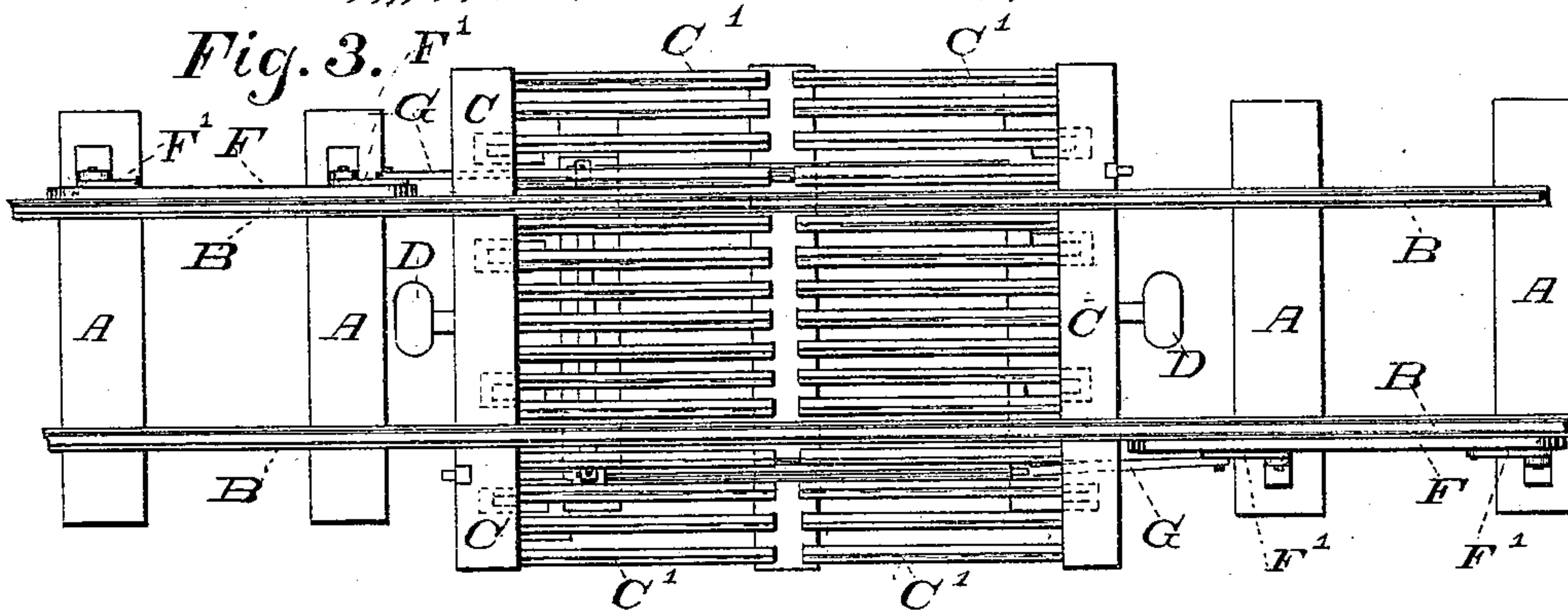


Fig. 4.

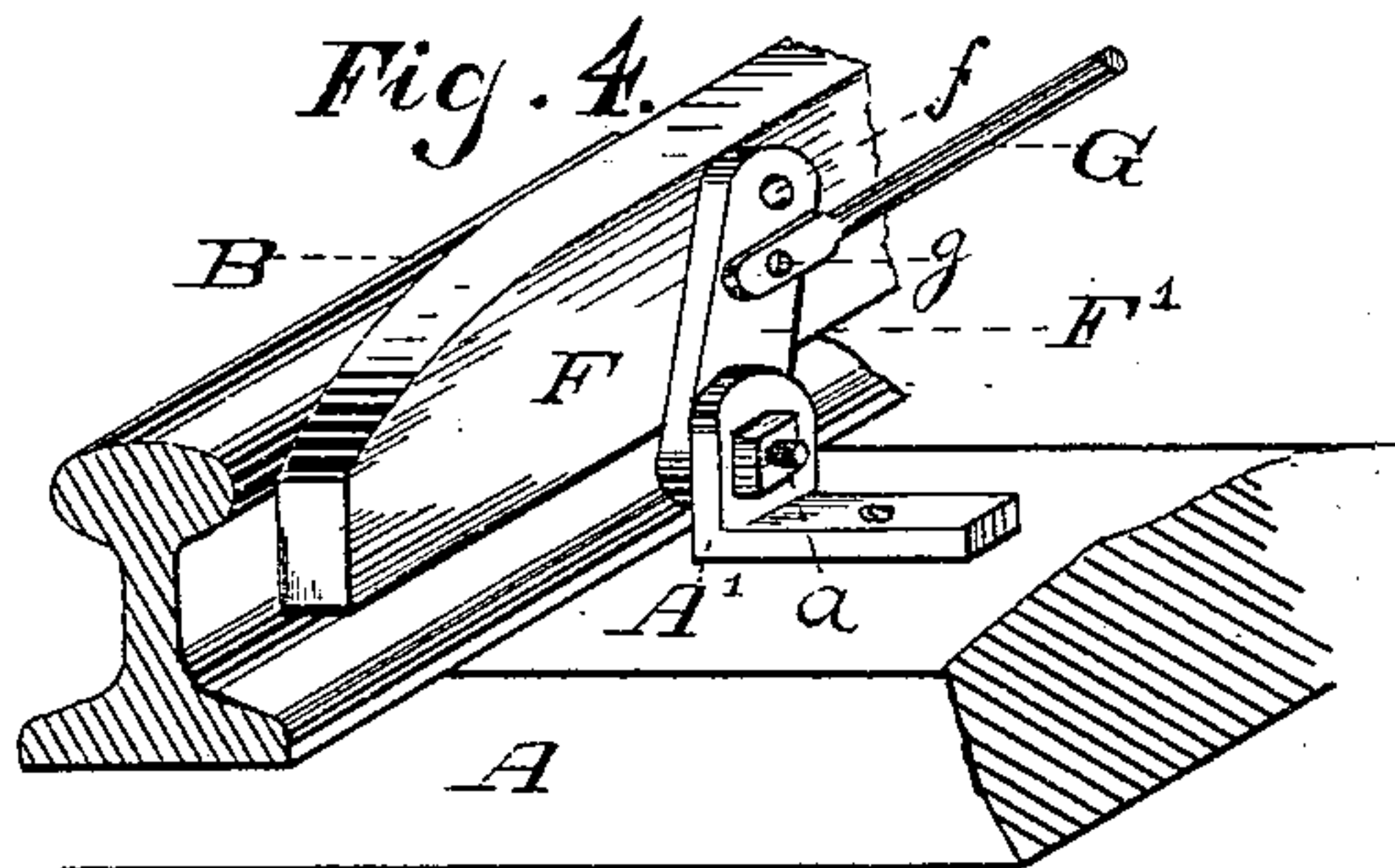
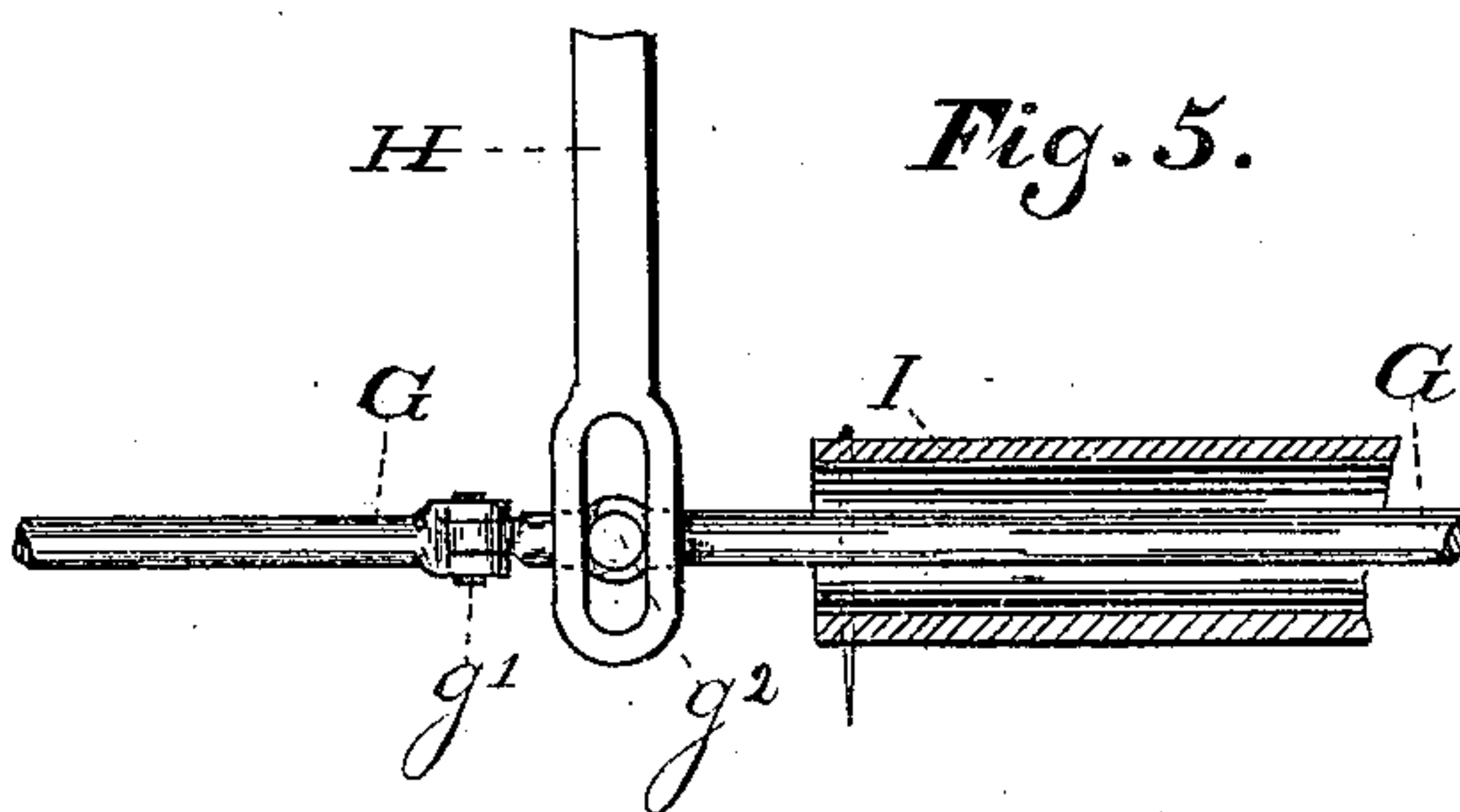


Fig. 5.



WITNESSES.

Jacob W. Loewer
Chas. L. Thurber.

INVENTOR.

Henry R. Vordermark,
PER
C. Bradford.
ATTORNEY.

UNITED STATES PATENT OFFICE.

HENRY R. VORDERMARK, OF INDIANAPOLIS, INDIANA.

TRACK-GATE FOR RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 270,707, dated January 16, 1883.

Application filed January 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, HENRY R. VORDERMARK, of the city of Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful Improvements in Track-Gates for Railways, of which the following is a specification.

My said invention consists of a track-gate for railways which is adapted to be opened by the passing of a train in either direction, and closed by a weight or spring attached thereto or forming part thereof, as will hereinafter be more particularly set forth.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a perspective view of my improved gate as applied to a railway-track when in closed position; Fig. 2, a longitudinal vertical section of Fig. 1; Fig. 3, a top or plan view of the same, but in open position or folded down upon the cross-ties or frame-work beneath; Fig. 4, a detail perspective view of one end of the operating-rail, its means of attachment, and adjacent parts; and Fig. 5, a horizontal section of the end of the tube through which a portion of the connecting-rods pass, and a top plan of a portion of said rods, and the joint and connections thereof.

In said drawings, the portions marked A represent the railway cross-ties; B, the rails; C, the cross bars or timbers of the gate; C', the rails or pickets thereof; D, counterbalancing-weights thereon; E, hinges upon which said gate is mounted; F, trip-rails alongside the rails B, with which the car-wheels come in contact, and thereby operate the gate; G, rods connecting said trip-rails with the gate; H, a cross-lever connecting the rods G together, and causing them to operate simultaneously; I, a tube through which the rods G preferably pass for a portion of their length; and J, a frame-work upon which the rods, cross-lever, gate-hinges, &c., are mounted.

The cross-ties A and rails B are of the ordinary form, and need no special description.

The cross-timbers C of the gate, carrying the pickets C', are hinged to the frame-work J, which is located in an excavation below the track, by the hinges E, and are adapted to be so moved upon said hinges as to stand substantially vertical, as shown in Figs. 1 and 2,

or to lie substantially horizontal, as shown in Fig. 3.

The trip-rail F is mounted upon links F' by means of pivots *f*, and said links are mounted upon the cross-ties A by means of brackets A' and pivots or bolts *a*. The rods G are attached to these arms by means of the pivots *g*. In the construction shown the rods G extend from the trip-rails F under the cross-timber C nearest them, through the pipes I, to the cross-timber of the gate farthest from the trip-rail to which they are attached, and are attached to said timber by means of an eye or joint on their under sides. They are jointed, as at *g'*, and are connected to the cross-bar H by the stud *g''* entering into slots in the ends of said bar. (See Fig. 5.) The bar H is pivoted centrally at *h* on the frame-work J, and connects the two sets of operating mechanism together, and causes both portions of the gate to open or close simultaneously—that is, when the rod G on one side is pushed in one direction it also, through this bar, pushes the corresponding rod on the other side in the other direction, and thus causes the two gate portions to fall toward each other.

The pipe I is simply a covering and guide for the direct-moving portion of the rod G, and prevents it from moving out of place.

The operation of my said invention is as follows: The wheels of a train approaching in either direction strike and press down one of the trip-rails F, which, by reason of the manner in which it is mounted, also moves forward toward the gate, and thus through the rod G, connected thereto, pushes against the under side of the gate-timber C farthest from it, and also, through the bar H and the other rod G, against the corresponding timber nearest it, thus giving said timbers a one-fourth rotation, and causing the upwardly-projecting gate-pickets C' to resume a horizontal position, and thus remain until the train has passed, when the pressure of the wheels being removed, the weights D cause the parts to assume their former positions.

Springs might of course be used instead of weights in this invention; but I prefer the construction shown.

In winter, when the use of a gate is less needed, and when, by reason of the accumulation of snow and ice, the apparatus would be

likely to be prevented from working freely, the gate can be fastened in horizontal position, and will then form the ordinary "cow-guard" which is in common use on most railroads; 5 and for the better accomplishment of this purpose I prefer to attach the pickets to the cross-timbers, so that when in horizontal position their corners shall be upward, as shown, rather than their sides. When the gate is in this 10 last-described position passing trains have no effect upon it, and it is therefore in no danger of being broken.

Having thus fully described my said invention, what I claim as new, and desire to secure 15 by Letters Patent, is—

1. The combination of the gates mounted on horizontal hinges, the weights for keeping them in vertical position, the rails F, mounted on links F' F', and the rods G, connected to 20 said gates at one end and to said links at the other, and mechanism for connecting the two gates, all substantially as shown and described, and for the purposes specified.

2. The combination of a gate mounted on horizontal hinges, the weight D for keeping the 25 same in vertical position, the rail F, mounted on links F' F', and the rod G, connected at one end to said rail or one of said links and to said gate at the other, all substantially as shown and described, and for the purposes 30 specified.

3. The combination of the two gates mounted on horizontal hinges, the two trip-rails F F, the two rods G G, connecting said gates and said rails, and the cross-bar H, connecting 35 said rods, whereby either of said rails and rods is enabled to operate both of said gates, substantially as set forth.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 40 30th day of December, A. D. 1881.

HENRY R. VORDERMARK. [L. S.]

In presence of—

C. BRADFORD,

CHAS. L. THURBER.