G. G. Hickman.

Railroad Frog.

No. 48,400. Patented Jun. 27, 1865.

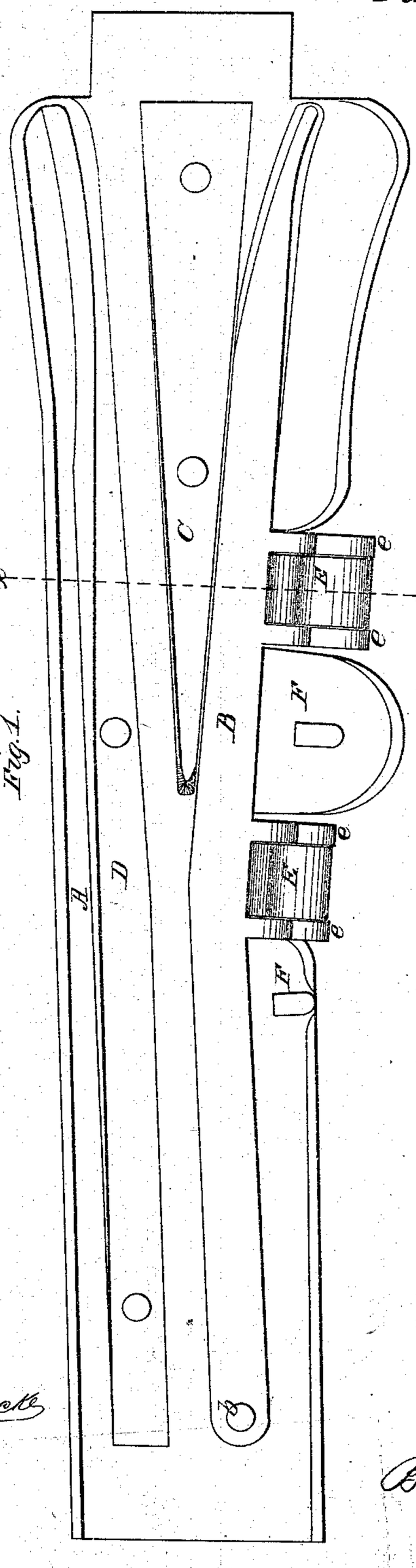

Fig. 1.

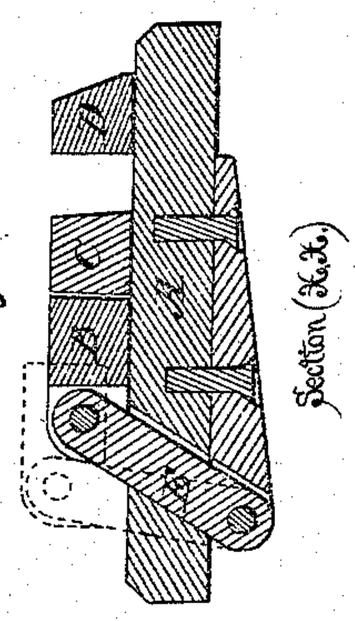

Fig. 2.

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UNITED STATES PATENT OFFICE.

GIBBONS G. HICKMAN, OF DOWNINGTOWN, PENNSYLVANIA.

IMPROVEMENT IN RAILROAD-FROGS.

Specification forming part of Letters Patent No. **48,400**, dated June 27, 1865.

To all whom it may concern:

Be it known that I, GIBBONS G. HICKMAN, of Downingtown, in the county of Chester and State of Pennsylvania, have invented a new and useful Improvement in Railroad-Frogs; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a plan. Fig. 2 is a transverse section in line *x x*.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in so constructing and applying the movable part of a railroad-frog that it is made capable of returning to its normal position by the force of gravitation after it has been moved by the car-wheels, and locked or retained in its closed or normal position by the weight of the wheels when the latter are running thereon.

The following description will enable others skilled in the art to which my invention appertains to fully understand and use the same.

In the accompanying drawings, A represents the timber or sub-support to which the various parts of the frog are attached.

B represents the movable rail or piece, which is turned out laterally by the flanges of the wheels, which are transferred from the rail C to the rail D, the end of the movable rail B being flared outward to allow the flanges to readily pass between it and the stationary rail C. The flanges of the wheels, which run upon the rails B and C, are on the inside of the latter, so that no lateral movement of the rail or turnout B will be produced by such wheels.

To admit of the movement which it is required to undergo, the rail B is pivoted at one end, as represented at *b*, and for the purpose of giving the requisite support to the rail when it is moved outward, and at the same time to effect a vertical as well as a lateral movement thereof, I employ hinges E E. These hinges are jointed at their lower ends to fixed points *e e*, and to their upper ends to lugs on the turnout or rail B. It will be seen that the links E E cause the rail B to rise or move upward as well as outward when acted upon by the flanges of the wheels, which run from rail C to rail D. Checks F F limit the lateral movement of the rail B, so that when it has been moved outward to its greatest extremity the hinges or supports E E are inclined inward slightly. Hence when the car-wheels have passed the rail B the latter resumes its normal position (which is against rail C) by its natural tendency—that is to say, by the influence of gravity. The wheels which run on the rail or turnout B holds the same firmly in its proper position—that is to say, close up to the rail C—its tendency being increased in that direction under the imposed weight of the train.

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

The rail B, applied and secured in such manner as to be caused to assume its normal position by the influence of gravity after it has been moved by the wheels of a passing train, and also adapted to be retained in position by the pressure of the wheels when the latter are running upon it, substantially as herein described and represented

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