J. M. FARRINGTON.

Mechanisms for Raising and Revolving Locomotive Wheels.

No. 153,165. Patented July 21, 1874.

Fig. 1.

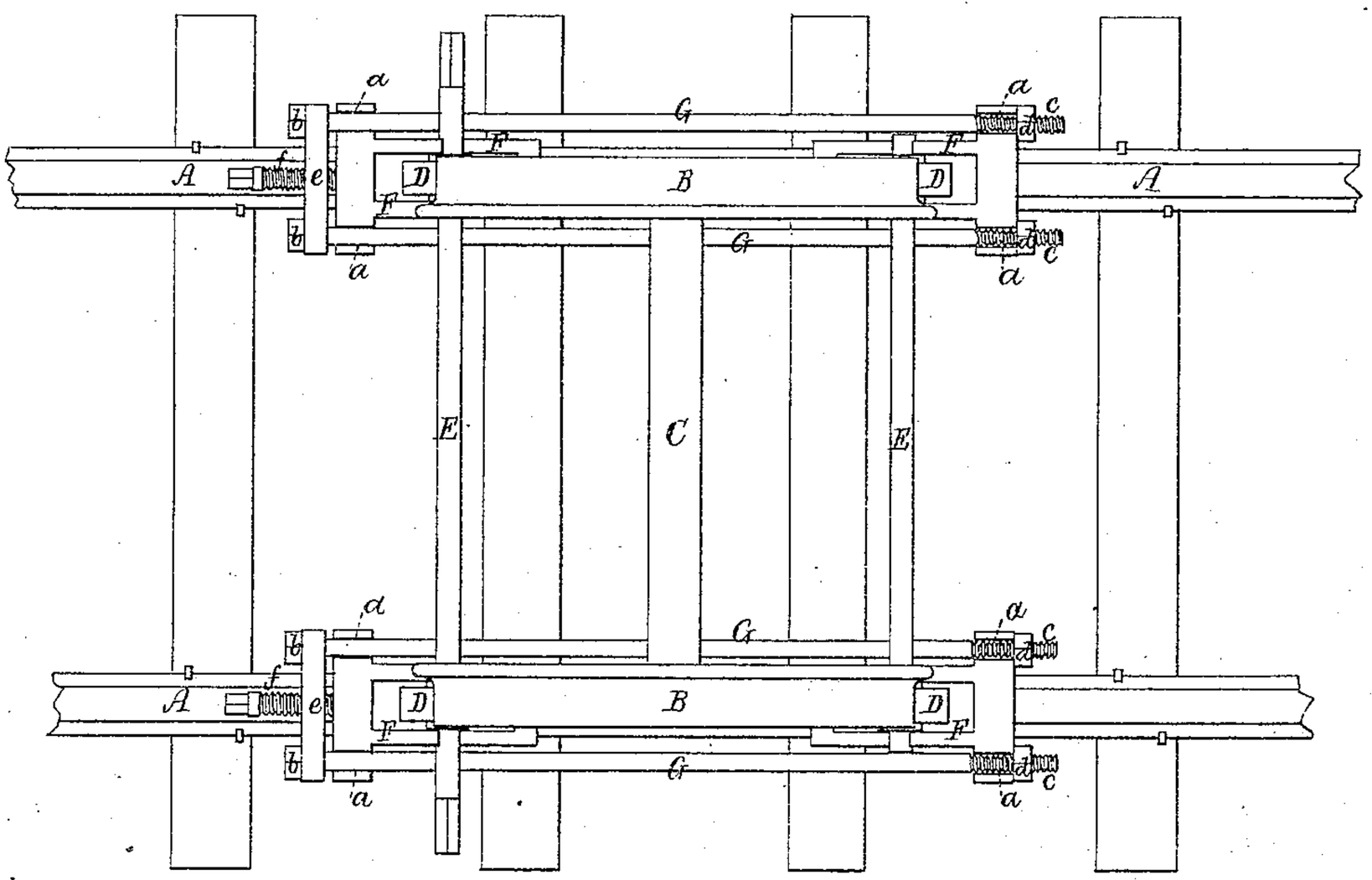
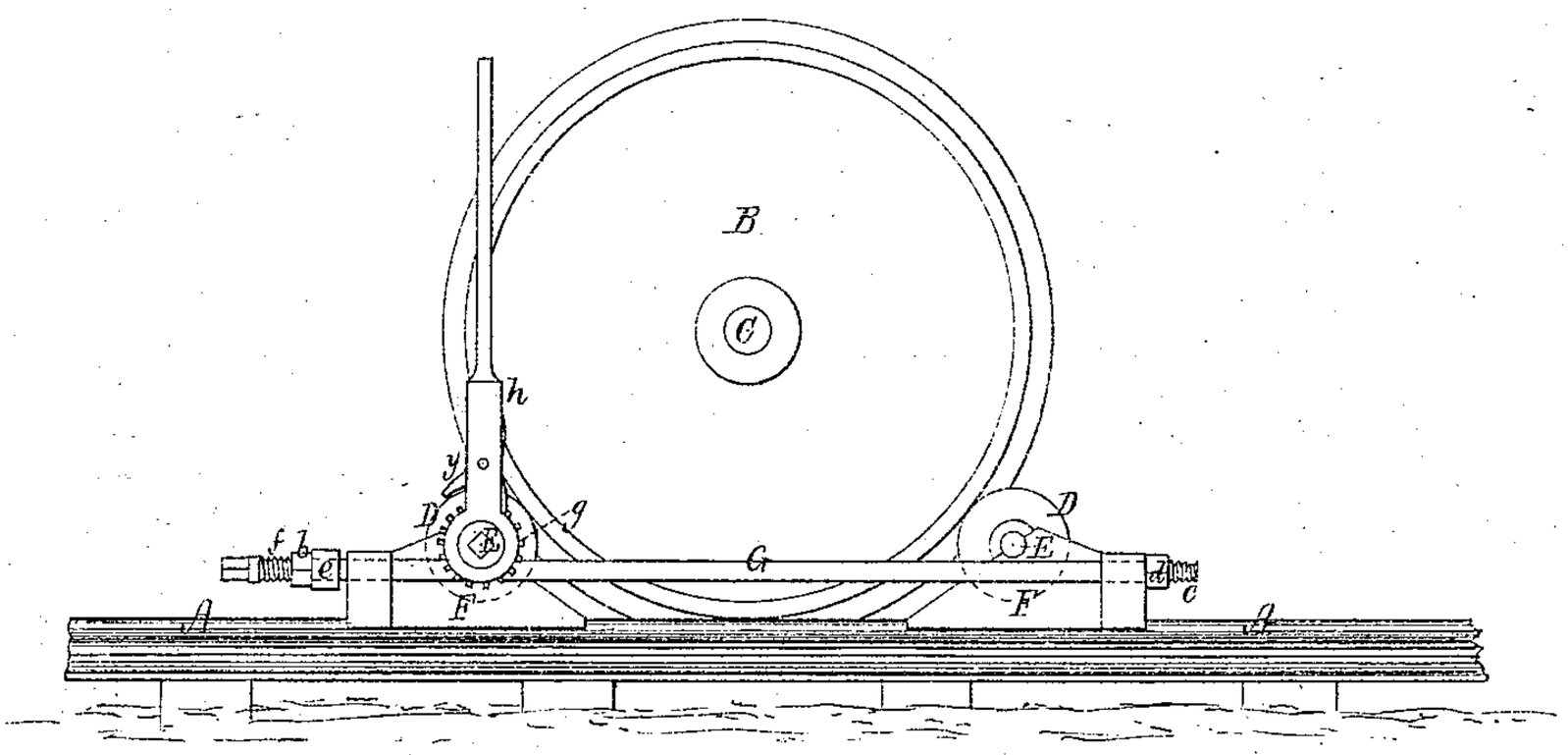


Fig. 2.



Witnesses.
S. N. Piper
L. N. Miller

James M. Farrington.
by his attorney
R. H. Eddy

UNITED STATES PATENT OFFICE.

JAMES M. FARRINGTON, OF CONCORD, NEW HAMPSHIRE.

IMPROVEMENT IN MECHANISMS FOR RAISING AND REVOLVING LOCOMOTIVE-WHEELS.

Specification forming part of Letters Patent No. **153,165**, dated July 21, 1874; application filed June 19, 1874.

To all whom it may concern:

Be it known that I, JAMES M. FARRINGTON, of Concord, of the county of Merrimack and State of New Hampshire, have invented new and useful Mechanism for Raising and Revolving the Driving-Wheels of a Locomotive Steam-Engine; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, and Fig. 2 a side elevation, of the said mechanism applied to the driving-wheels of an engine.

The purpose of raising off the track the driving-wheels of an engine is to enable them to be turned or revolved for the proper adjustment of the valves and eccentrics.

By my mechanism they not only can be raised but turned as occasion may require for for such purposes.

It is well known to most, if not all, makers or repairers of locomotive steam-engines that while one is at rest on a track it is no easy matter to revolve its driving-wheel without moving the engine along the track. With my mechanism all can be accomplished with great facility.

In the drawings, A A denote part of a railway-track, and B B a pair of locomotive driving-wheels resting on the rails thereof and connected by an axle, C. To the tread or periphery of each wheel B there is applied, as shown, two smaller wheels, D D, fixed upon horizontal shafts E E, that extend across the track, and are supported in bearings in two pairs of shoes, F F, placed directly upon the rails, one pair being upon each rail, and one shoe of each pair being in advance and the other in rear of one of the engine-wheels. The two shoes of each pair I connect by two rods, G G, shown as resting in notches *a a* formed in the shoes, or in ears projecting therefrom. Each rod is also exhibited as provided at one end with a head, *b*, and at and near the other with a screw, *c*, to receive a nut, *d*. Each pair of the rods near their heads may go through a cross-bar, *e*, arranged with respect to one of the shoes in manner as shown, and having a screw, *f*, screwed through its middle and against the shoe. One of the shafts may have applied to it a crank, or, what is better, a ratchet-wheel, *g*, provided with a lever, *h*, and pawl *y* for revolving it. One pair of the supporting-rollers may have shafts disconnected from those of the other pair; but it is preferable to have but two shafts crossing the track and connecting one pair of the smaller or supporting wheels with the other, all as shown, as in such case both locomotive driving-wheels may be simultaneously turned without torsion strain on their axle.

If we suppose the shoes F F and their wheels D D to be arranged with each of the locomotive-wheels in manner as shown, we, by revolving the nuts *d d* or the screw *f*, can force the two shoes toward each other, and the wheels D D against the locomotive-wheel, in a manner to force it upward off the track. Next, by turning one of the shafts E E, we shall revolve the wheels D D of it, and as a consequence turn the driving-wheels.

Thus it will be seen that by my mechanism we have the power not only of readily forcing upward the locomotive-wheels relatively to the track, but of revolving such wheels in either direction, more or less, as may be desirable during the process of effecting the adjustment of the valves and eccentrics.

I claim as my invention as follows, viz:

1. The pair of shoes F F, provided with the small wheels D D, for holding rods G G at their proper distances apart, all being substantially as described and represented.

2. The combination of the cross-head *e* and screw *f* with the rods G G and the shoes F F, provided with the small wheels D D, such head *e* and screw *f* being for moving or adjusting one of said shoes nearer to or farther from the other.

3. The combination of the two pairs of shoes F F, their wheels D D D D, the connecting-shafts E E, the connection-rods G G G G of both pairs of shoes, all being substantially as set forth.

JAMES M. FARRINGTON.

Witnesses:
R. H. EDDY,
S. N. PIPER.