W. B. HYDE

Improvement in Traction Locomotives and Railways.

No. 131,685. Patented Sep. 24, 1872.

Fig. 1.

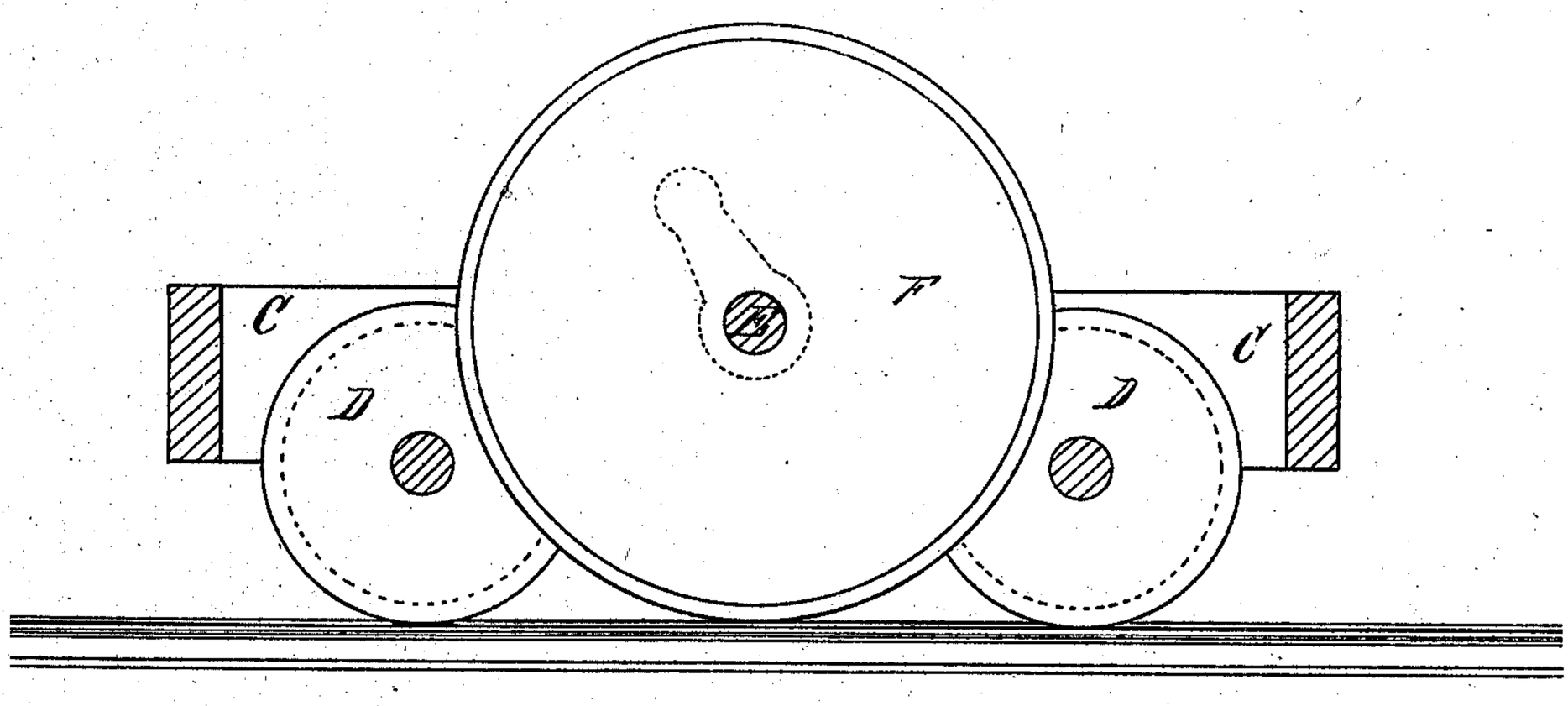


Fig. 2.

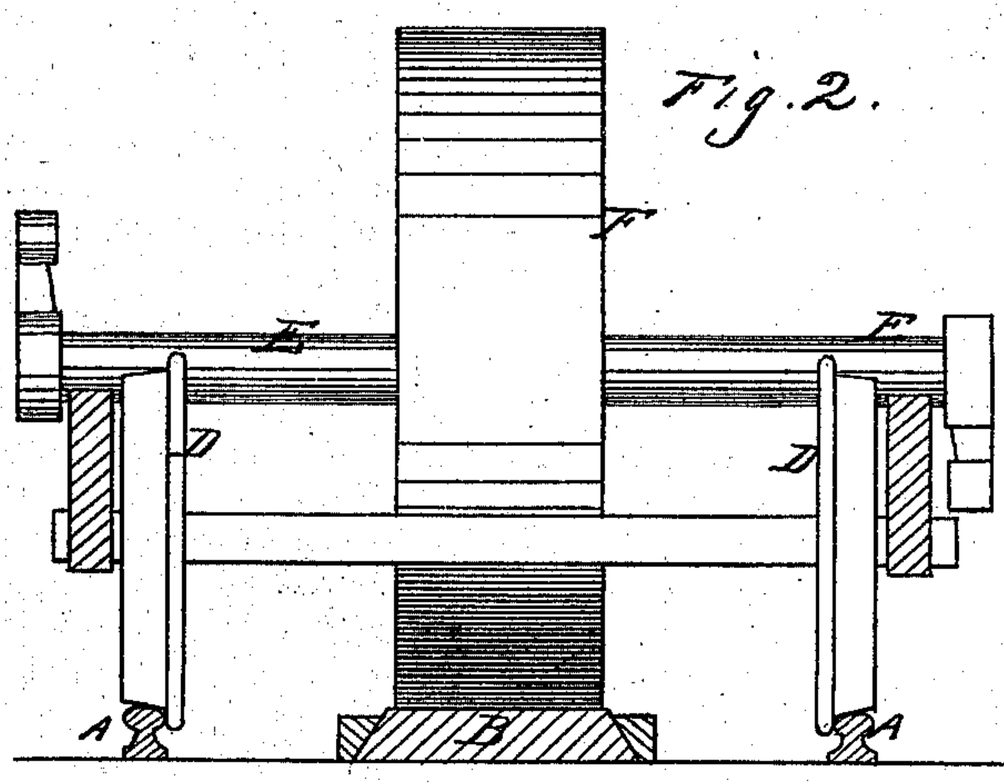


Fig. 3.

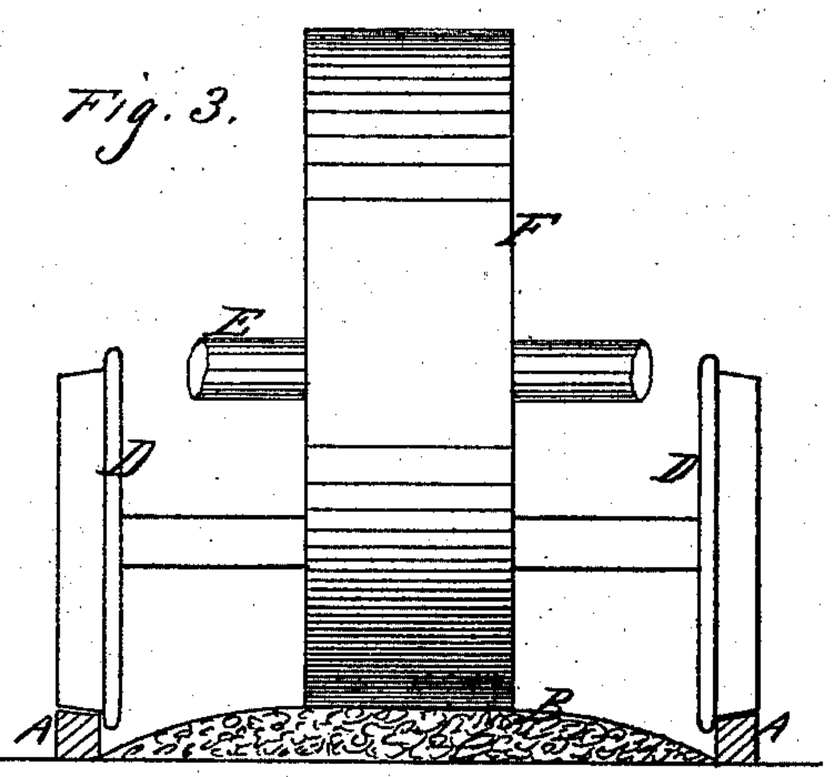
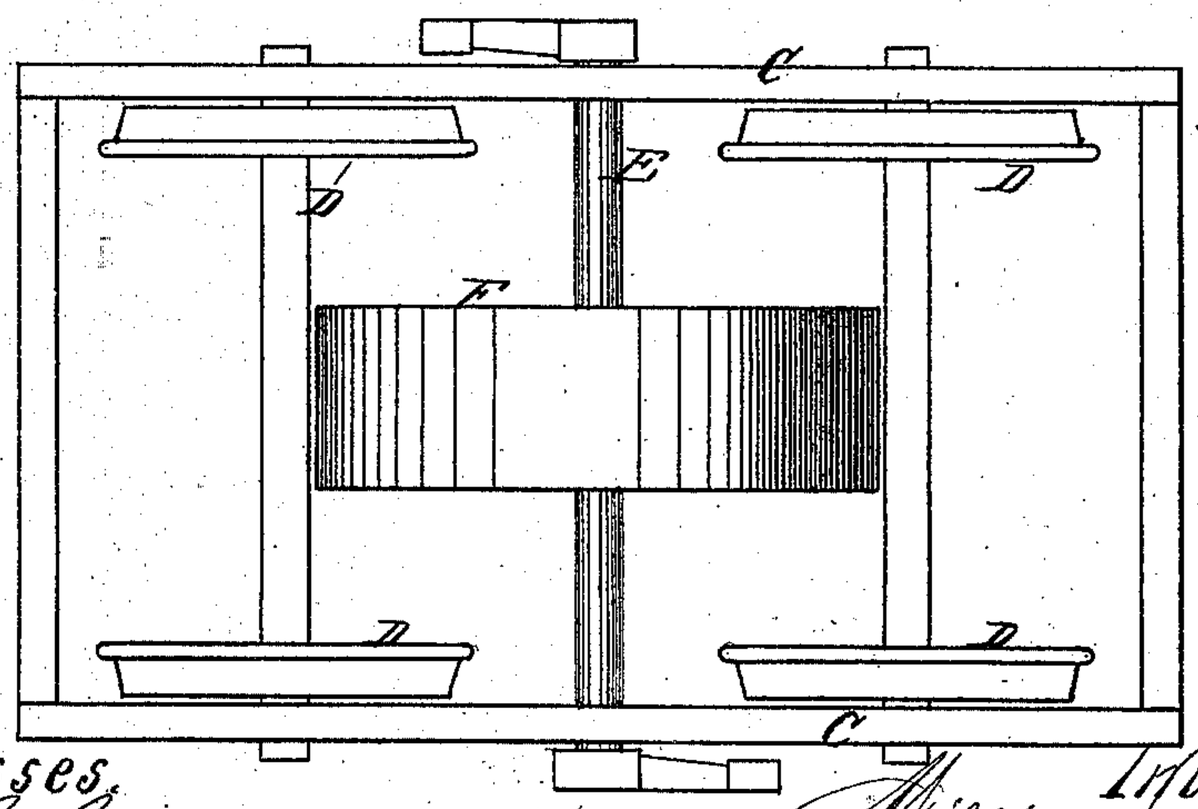


Fig. 4.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN TRACTION LOCOMOTIVES AND RAILWAYS.

Specification forming part of Letters Patent No. **131,685**, dated September 24, 1872.

To all whom it may concern:

Be it known that I, WILLIAM B. HYDE, of Oakland, county of Alameda, State of California, have invented certain new and useful Improvements in Railways; and I do hereby declare the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

My invention relates to traction-locomotives; and it consists, first, of an ordinary track, midway between the rails of which is a smooth bearing surface, almost if not quite level with the tops of the rails; and, secondly, in the employment of a locomotive or traction engine provided with the ordinary bearing-wheels which rest and move upon the rails; but instead of the usual driving-wheels I employ a large driving-wheel, which is placed inside of the outer lines and at or near the center of the locomotive, so as to bear upon the level surface above mentioned. This wheel is mounted upon a separate shaft to which the power is applied, so that its traction upon the road will move the locomotive and draw a train of cars in the usual way.

In order to more fully illustrate and explain my invention, reference is had to the accompanying drawing forming a part of this specification, in which—

A A represent the two rails of an ordinary railroad track, and B represents another track or roadway, which may be made of any suitable material, between the two rails A A.

This track can, if desired, be formed of gravel in the usual way of forming the bed of the road, in which case it should be made crowning, as shown at Fig. 3, so that its upper surface will be even with the surface of the rails; or a narrow track of cement or asphaltum, or a plank or metallic rail can be placed upon the road between the rails, so as to form the necessary surface.

C represents the truck of any locomotive or traction engine, having the ordinary bearing-wheels D supporting it upon the two rails A A in the usual manner. E is a shaft which bears in the sides of the locomotive frame, and is here shown as located about its middle and midway between the axles which carry the wheels D. Upon this shaft is a large wheel, F, having a broad face, and which is so placed as to bear upon the middle track or roadway B. If desired, this wheel can be provided with an elastic tire for the purpose of giving it greater tractive power, and also for the further purpose of avoiding injury to the track B. The power of the engine is applied directly to the shaft E, so as to cause the traction-wheel F to travel upon the central track B, and by its tractive power propel the locomotive with its train along the track. If required two or more of these traction-wheels can be employed in various positions with reference to each other and to the wheels D.

Having thus described my improved traction-railway, what I claim, and desire to secure by Letters Patent, is—

The application to a locomotive of the bearing-wheels D D to run upon the tracks A A, and one or more central traction-wheels, F, bearing on a central road-bed, B, all combined and arranged substantially as and for the purpose set forth.

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Witnesses:

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