

(No Model.)

L. BRAUER.

CAR BRAKE.

No. 314,422.

Patented Mar. 24, 1885.

Fig. 1.

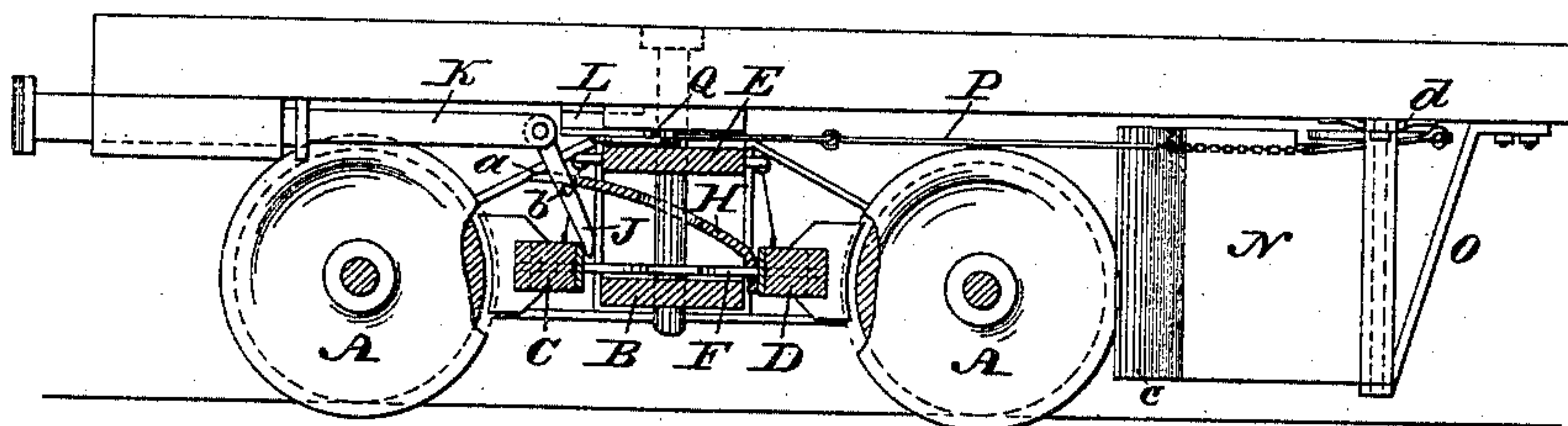


Fig. 2.

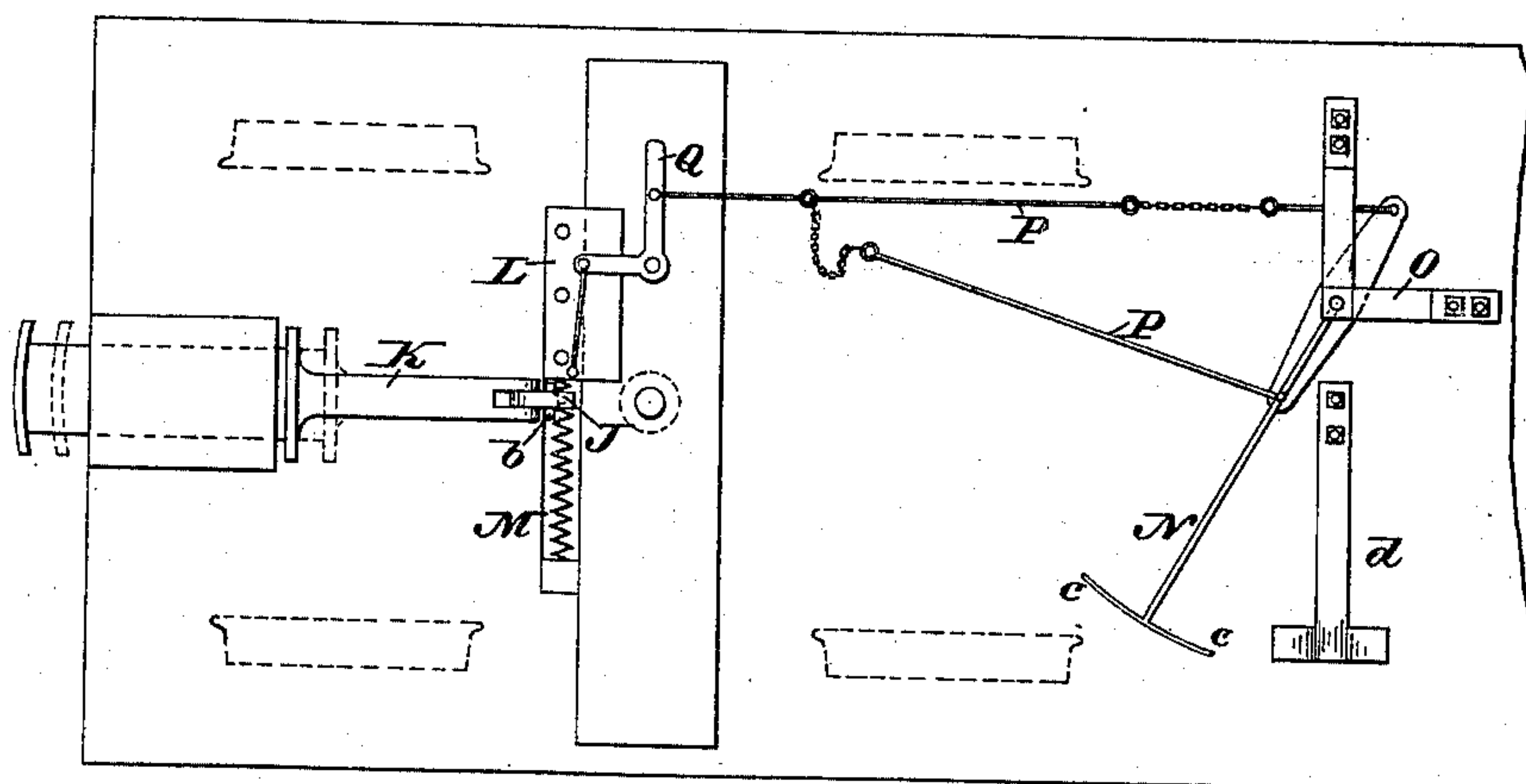
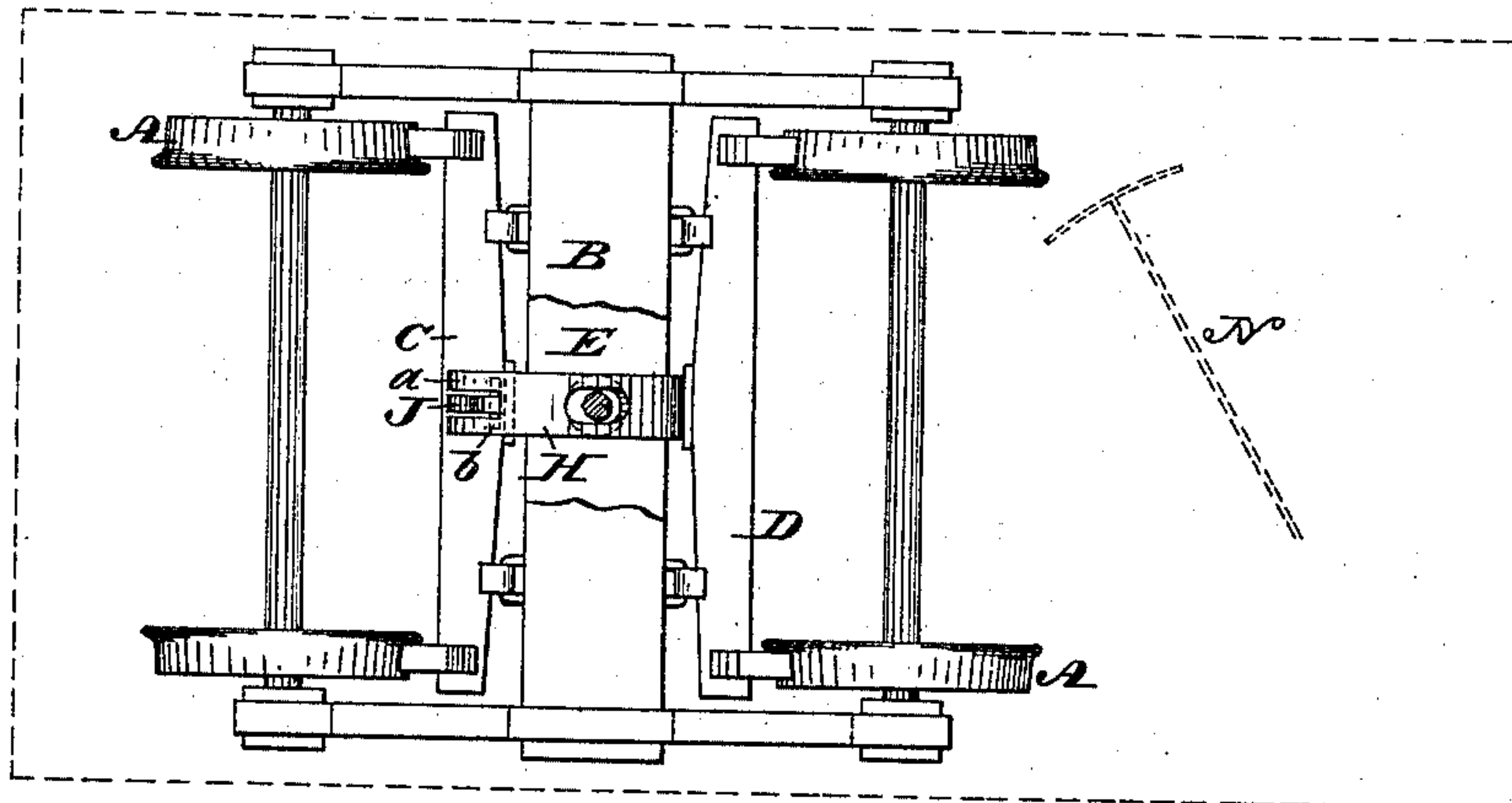


Fig. 3.



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## CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 314,422, dated March 24, 1885.

Application filed November 23, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS BRAUER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Car-Brakes, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a partial side elevation and a partial longitudinal section of a car-brake embodying my invention. Fig. 2 represents a bottom plan view, the truck being removed. Fig. 3 represents a bottom view, partly broken.

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

My invention relates to improvements in car-brakes; and it consists in providing the same with a fan which releases the locking mechanism, thereby permitting the draw-bar to operate the brake-beam; also in other details hereinafter fully set forth.

Referring to the drawings, A represents the wheels, and B the bottom bolster, of a car-truck.

C and D represent the brake-beams attached to the top bolster, E, the same being supplied with shoes in the usual manner.

F represents a rod having its end portions loosely resting in holes in the brake-beams C and D, and its central portion curved around the king-bolt G. Mounted on said rod F is an arm, H, having a slot in the central portion, through which passes the king-bolt G, the said arm has also a bifurcated portion, *a*, in which a lever, J, works, the latter being pivotally connected at one end to a draw-bar, K, and having the other end inserted in a recess in the brake-beam C. Projecting sidewise from the lever J is a pin or stud, *b*, which serves to keep the free end of the arm H in proper position.

L represents a lock-block, which is moved in one direction by a spring, M, which is properly secured, and in the opposite direction by means of a fan, N, pivotally secured to bearings in the bottom of the car and a hanger, O. The fan has on both sides of its free end a wing, *c*, at or about right angles thereto. A spring-catch, *d*, secured to the car-bottom serves to keep the fan at rest when the car is

not in motion. The fan N is connected by rods and chains P to a crank-lever, Q, which is connected to the lock-block L, all the said parts being connected in such manner that the swinging of the fan serves to move the said lock-block away from or out of contact with the end of the draw-bar.

This device does not do away with the ordinary hand-brake now in use, but, acting automatically, serves as a help thereto. It is designed as a momentum-brake, acting when the cars are forced together by the slacking of the speed of the engine.

The operation is as follows: The car being under way, the fan is swung back by the action of the wind, and thus, by means of its connections, the lock-block L is withdrawn from or moved out of the way of the end of the draw-bar K, which, being compressed, pushes, by means of the lever J, the arm H against the brake-beam D, forcing the shoes thereon in close contact with the adjacent wheels, when the inner part of the bifurcated portion *a* serving as a fulcrum the lever J forces the beam C outward, thus binding the wheels on that side. When the draw-bar no longer exerts any pressure on the lever J, the brake-beams are returned to their normal positions in the usual manner. If the car is not in motion, or is moving slowly, the fan will remain at rest and the lock-block will prevent the action of the draw-bar.

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

1. A car-brake having a fan and a lock-block connected by suitable rods, chains, and levers, the said lock-block being disconnected or separate from the draw-bar of the car and operated by the said fan so as to be drawn out of the way of the end of the said draw-bar, substantially as and for the purpose set forth.

2. In a car-brake, a lever attached to a draw-bar, in combination with a bifurcated arm mounted loosely on a bolt and resting on the said lever, the lower end of the said lever directly acting on one of the brake-beams, and one end of the bifurcated arm directly acting on the other brake-beam, substantially as and for the purpose set forth.

3. In a car-brake, the fan N, in combination with lock-block L, means connecting said block and fan, draw-bar K, lever J, attached to said draw-bar, bifurcated arm H, loosely  
5 mounted on a bolt and resting on a pin attached to the lever J, substantially as and for the purpose set forth.

4. In a car-brake, the draw-bar K, in combination with the lever J, having the pin b,  
10 bifurcated arm H, rod F, and brake-beams C and D, substantially as and for the purpose set forth.

5. In a car-brake, a fan, N, having a wing, c, in combination with a hanger, O, and spring d, the said fan being pivotally supported in  
15 said hanger, substantially as and for the purpose set forth.

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Witnesses:

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