

Daniel Arndt & D.C. Washington. Car Brake.

No. 119,103.

Fig. 1

Patented Sep. 19, 1871.

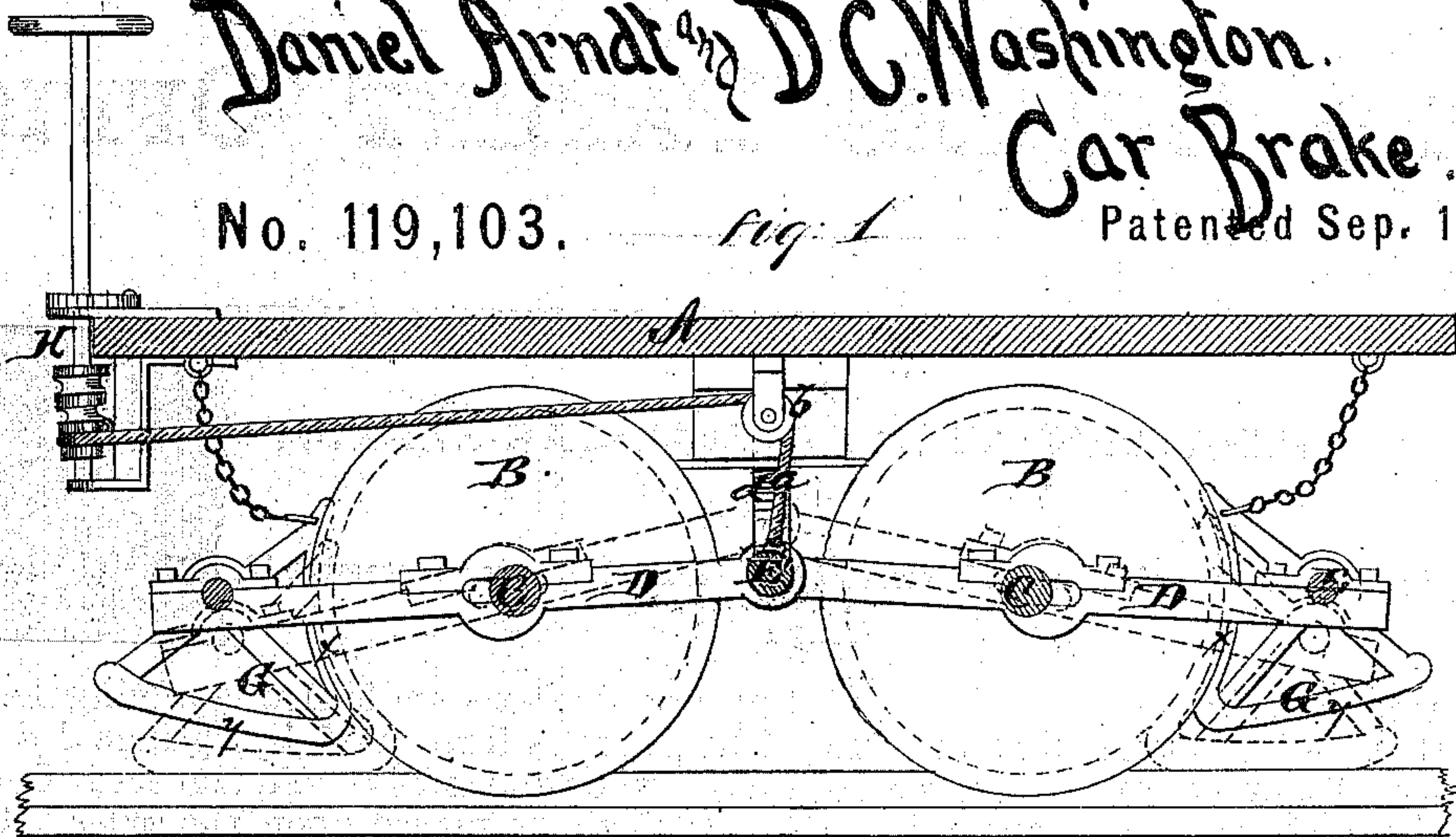
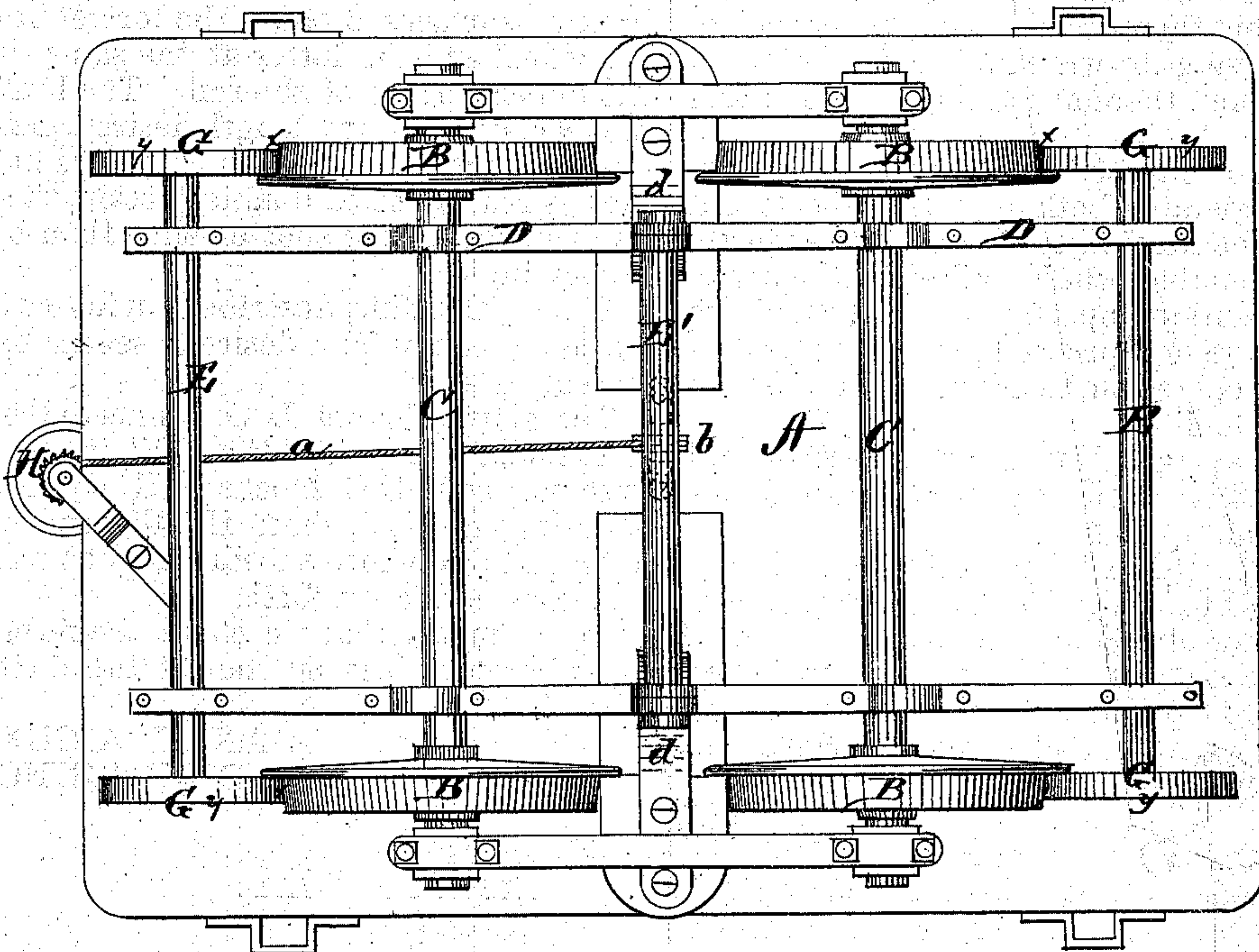


Fig. 2



Witnesses.

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UNITED STATES PATENT OFFICE.

DANIEL ARNDT AND DILLINGHAM CLARK WASHINGTON, OF CLEVELAND, OHIO.

IMPROVEMENT IN RAILWAY-CAR BRAKES.

Specification forming part of Letters Patent No. 119,103, dated September 19, 1871.

To all whom it may concern:

Be it known that we, DANIEL ARNDT and DILLINGHAM CLARK WASHINGTON, of Cleveland, in the county of Cuyahoga and in the State of Ohio, have invented certain new and useful Improvements in Car-Brakes; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of our invention consists in a car-brake which operates both upon the wheels and track, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal vertical section, and Fig. 2 is a bottom view of a car-truck with our brake attached.

A represents the platform or bed; B B, the wheels; and C C, the axles of a car-truck, constructed in any of the known and usual ways. Each of the axles C passes through elongated slots in two levers, D D, the outer ends of which are connected by a shaft or rod, E, having the brake-blocks G G attached to its ends. The inner ends of the four levers D D are hinged or pivoted and connected together by a center rod or shaft, E', to which the chain *a* is attached, said chain passing up over a pulley, *b*, and thence to the usual

upright shaft or spindle H for applying the brakes. The brake is thrown off by springs *d d* bearing down upon the rod E'. The levers D D need not necessarily be placed upon the axles C C; they may be placed upon separate bearings in any suitable manner. The brake-blocks or shoes G G are constructed, as shown in Fig. 1, with two braking-surfaces, *x* and *y*, the former braking on the wheel and the latter at the same time upon the upper surface of the rail. The braking-surface *y* may be of any length desired, making any desired amount of friction. By this brake having, as readily seen, double friction, the car may be stopped in a far shorter time than by the ordinary brake.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The slotted levers D D, connected by means of the shafts or rods E E and E', in combination with the axles C C, blocks G G, chain *a*, pulley *b*, springs *d d*, and shaft H, all constructed and arranged to operate substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 11th day of May, 1871.

DANIEL ARNDT.
D. C. WASHINGTON.

Witnesses:

ALFRED ELWELL,
T. M. MARCY.