

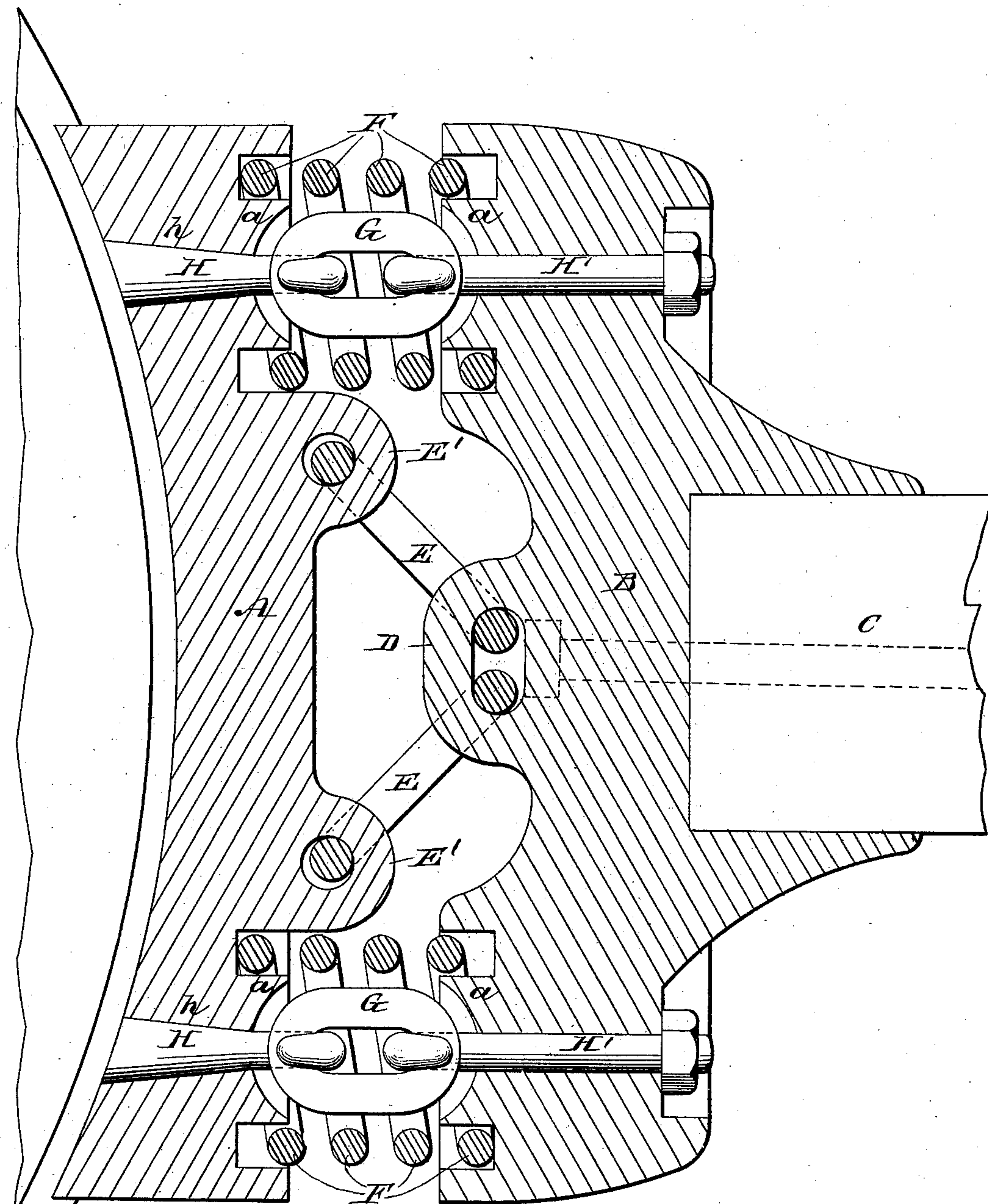
(No Model.)

D. D. CHIDESTER.

CAR BRAKE.

No. 376,582.

Patented Jan. 17, 1888.



WITNESSES:

John H. Keener

C. Sedgwick

INVENTOR:

D. D. Chidester

BY

Munn & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

DAVID D. CHIDESTER, OF HACKETTSTOWN, NEW JERSEY, ASSIGNOR OF
PART TO GEORGE E. KNOWLES, OF NEW YORK, N. Y., AND ELISHA M.
OSMUN, OF HACKETTSTOWN, NEW JERSEY.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 376,582, dated January 17, 1888.

Application filed September 15, 1887. Serial No. 249,748. (No model.)

To all whom it may concern:

Be it known that I, DAVID D. CHIDESTER, of Hackettstown, in the county of Warren and State of New Jersey, have invented a new and useful Improvement in Car-Brakes, of which the following is a full, clear, and exact description.

The object of my invention is to provide a practical brake for railway-cars which will prevent the "setting" and sliding of the wheels and the consequent flattening of the treads thereof, which is the principal cause of the present rapid destruction of car-wheels; and to this end my invention consists of a brake having a shoe connected to a main body, combined with an interposed spring or springs.

The invention also consists in the construction of the brake, as hereinafter described and claimed.

Reference is to be had to the accompanying drawing, forming a part of this specification, in which the figure is a vertical sectional elevation of my new brake, showing a portion of a car-wheel, and also a portion of the end of the common beam to which the main body of the brake is secured.

The principal feature of my invention is the brake-shoe A, constructed and arranged to exert a yielding pressure upon the car-wheels. In addition to this action, I so connect the shoe A to the main body B of the brake as to admit of a slight endwise movement and at the same time a slight backward movement, so that there will be a slight automatic releasing of the wheel by the shoe in case overpressure is exerted or the shoe becomes heated.

The main body B is secured to the brake-beam C, and is formed, by preference, with a central loop or eye, D, in which the links E E are placed for holding the shoe A, the latter being formed with the eyes E' E', to receive said links, as shown.

F F represent the interposed springs. These are by preference of heavy coiled wire placed upon the bosses a a and surrounding the

links G, which join the bolts H H' and constitute a flexible connection of the shoe A to the main body B.

The bolts H' are plain hooked bolts, while the bolts H are tapered and enter tapered sockets h, formed in the shoe, so that the wearing away of the shoe and end of the bolts will not release the shoe.

The eyes E' E' of the shoe A stand one above and the other below the eye D of the main body B, so that the links E E will stand one at an upward and the other at a downward slant, as shown. The lower link serves to hold the shoe A when forced against the wheel from being carried downward too far by frictional contact, and it also permits the shoe to automatically relieve itself from the wheel by a back action of the shoe at the bottom. At the same time the top of the shoe will be forced in closer contact with the wheel. The instant the wheel is somewhat released by the bottom of the shoe the latter is suddenly forced to the wheel again by the spring and the top will be forced back, the shoe having a kind of shifting fulcrum at the links E. In this manner the shoe when first forced against the wheel has an ordinary action; but as soon as the wheel begins to heat the shoe it vibrates, and while it exerts a powerful retarding action it will not cause the wheel to slide.

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

1. A brake composed of a main body, B, and a shoe, A, connected to the main body by flexible or vertical yielding connections, in combination with springs interposed between the main body and the shoe, substantially as and for the purposes set forth.

2. The shoe A, secured to the body B by links E, in combination with the springs F, substantially as described.

3. The shoe A, connected to the body B by the central links, E, substantially as described.

4. The shoe A, connected to the body B

by bolts H H' and links G, substantially as described.

5. The shoe A, connected to the body B by the diagonal links E, substantially as described.

6. The shoe A, connected to the body B by the flexible connections H H' G and cen-

tral links, E, in combination with the springs F, placed between the shoe and main body B, substantially as described.

DAVID D. CHIDESTER.

Witnesses:

H. A. WEST,

C. SEDGWICK.