

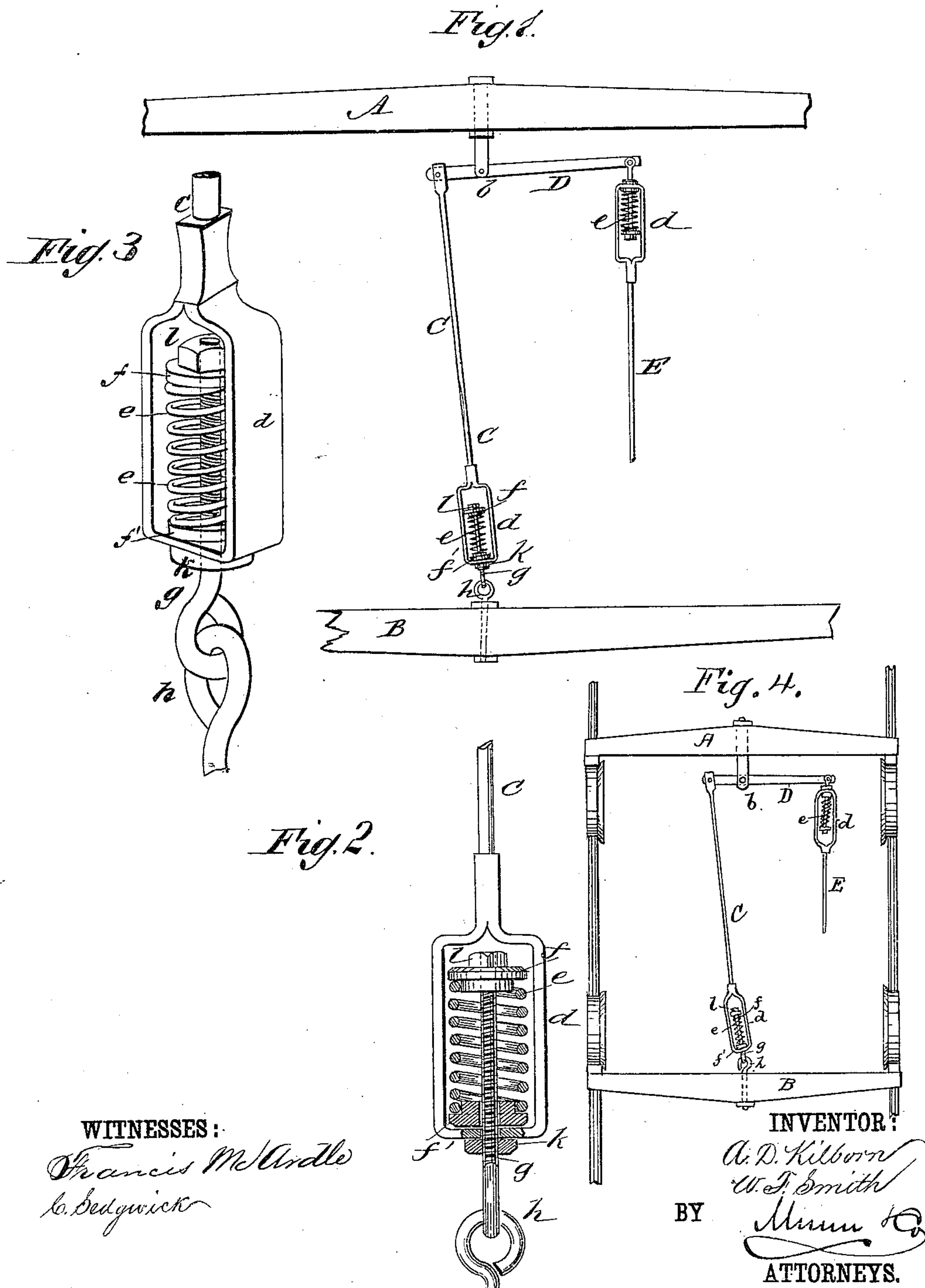
(No Model.)

A. D. KILBORN & W. F. SMITH.

CAR BRAKE.

No. 270,440.

Patented Jan. 9, 1883.



UNITED STATES PATENT OFFICE.

ALDEN D. KILBORN AND WILLIAM F. SMITH, OF TUCSON, ARIZONA TERRITORY.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 270,440, dated January 9, 1883.

Application filed June 29, 1882. (No model.)

To all whom it may concern:

Be it known that we, ALDEN D. KILBORN and WILLIAM F. SMITH, of Tucson, in the county of Pima and Territory of Arizona, have
5 invented a new and useful Improvement in Brake-Rods for Trucks, of which the following is a full, clear, and exact description.

This invention relates to brakes for the trucks of locomotive-engines and railroad-cars, in
10 which brake-beams carrying brake-shoes on their opposite ends are used. These beams are connected together by a brake-rod and attached devices for drawing them toward each other, so as to cause the brake-shoes to act
15 upon duplicate pairs of wheels at the same time.

The invention consists in the peculiar construction and arrangement of the parts, as hereinafter more fully set forth, and pointed out in
20 the claim.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

25 Figure 1 represents a plan of a pair of brake-beams with our improvement applied to the rods by which said beams are connected and operated. Fig. 2 is a longitudinal partly-sectional view, upon a larger scale, of one of the
30 adjustable rod-connections. Fig. 3 is a perspective view thereof; and Fig. 4 represents a plan view of a pair of brake-beams provided with brake-shoes on their ends, two pairs of car-wheels, and our improvements applied to
35 the brake-beams.

A B indicate the pair of brake-beams, and C the rod by which they are connected, such connection being made in part through the intervention of a lever, D, pivoted at *b* to the
40 beam A, and having the draw-rod E attached to it. The rod C is constructed at the end by which it is attached to the beam B with a strap, *d*. This strap serves to receive within it either a rubber or coiled-metal spring, *e*, the tension
45 of which is in direction of the length of the rod C, and which rests at its opposite ends between heads *f f'*, arranged upon or around a screw-rod, *g*, that passes centrally through the

spring and in line with the rod C. Said screw-rod *g* projects freely or loosely through the
50 outer end of the strap *d*, and is attached by an eye or loop to an eyebolt, *h*, that secures it to the beam B. The heads *f f'* are both fitted to admit of an independent sliding movement along the screw-rod *g* to provide for the ex-
55 pansion and contraction of the spring, the tension of which may be regulated either by a screw-collar, *k*, on the outer end of the strap, or by a nut, *l*, at the back of the head *f*, said collar and nut fitting the thread on the screw-
60 rod *g*. In this way or by these means is the rod C, which connects the beams A B, made adjustable and secured by an elastic connection. The draw-rod E, by which the brake is
65 operated, has a similar adjustable and elastic connection with the lever D.

We are aware that springs have heretofore been employed, in connection with brake appli-
ances, to allow the wheels to revolve when the
70 brakes are applied, instead of slipping on the tracks, and we therefore lay no claim, broadly, to the employment of springs with brake appliances, our invention being confined to the construction and arrangement of parts pointed
75 out in the claim.

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

In a car-brake, the combination, with the brake-beams A B, having brake-shoes on their
80 ends, and the adjustable brake-rod C, provided with the strap *d*, threaded eyebolt *g*, heads *f f'*, spring *e*, nuts *l k*, and eyebolt *h*, secured to the brake-beam B, of the draw-rod E, provided at its outer end with a strap,
85 spring, heads, and nuts, as on the brake-rod C, and lever D, fulcrumed in the beam A, and having its ends pivoted to the brake, and draw-rods C E, substantially as shown and described.

ALDEN D. KILBORN.
WILLIAM F. SMITH.

Witnesses:

F. K. MILLER,
R. D. FERGUSON.