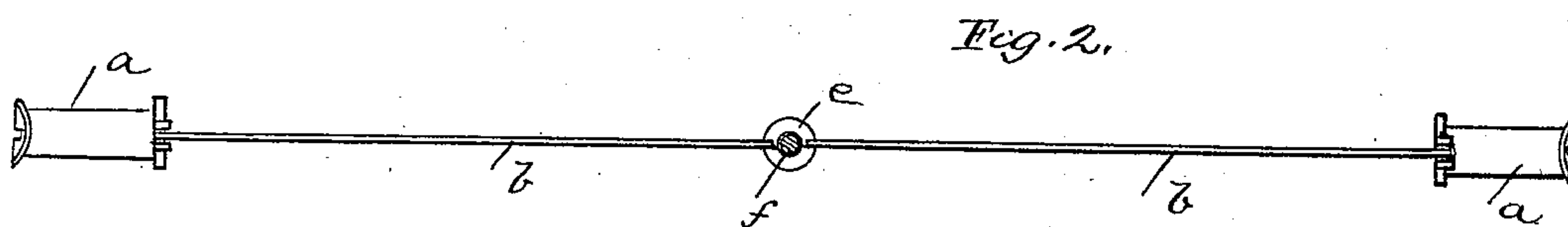
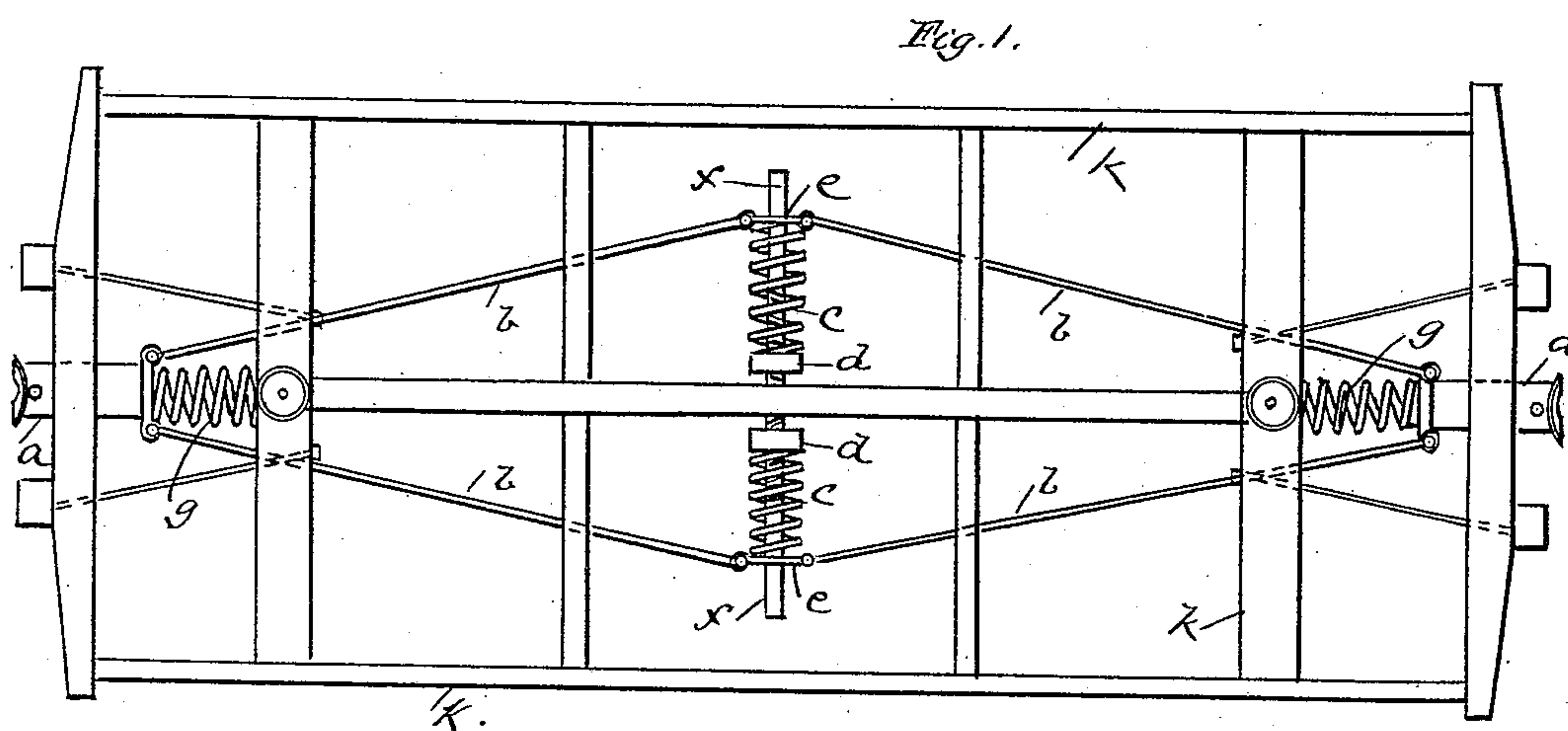


(No Model.)

J. M. MAXWELL.
DRAW BAR FOR CARS.

No. 450,247.

Patented Apr. 14, 1891.



Wth Messrs:
H. E. Farnion,
J. A. Herrou

Vrsntor.
 James McFarrell
 Per. O D Lewis
 Adm'y.

UNITED STATES PATENT OFFICE.

JAMES M. MAXWELL, OF PITTSBURG, PENNSYLVANIA.

DRAW-BAR FOR CARS.

SPECIFICATION forming part of Letters Patent No. 450,247, dated April 14, 1891.

Application filed February 6, 1891. Serial No. 380,523. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. MAXWELL, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Draft-Regulating Devices for Railway-Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improved draft-regulator for railway and other cars; and it consists in certain details of construction and combination of parts, as will be fully set forth hereinafter.

In the accompanying drawings, Figure 1 is an inverted plan view of the frame of a railway-car provided with my improved draft-regulator. Fig 2 is a side elevation of the connected draw-heads.

To provide a railway-car with my improvement I connect the draw-heads *a* together by four rods or bars *b*. These rods *b* are of equal length and are joined at their inner ends to a circular plate *e*. Secured to the frame *k* of the car is a transverse-threaded bar *f*, over which the plates *e* operate. Be-

tween these plates *e* and operating on the bar *f* are two springs *c* and nuts *d*, the said nuts *d* affording a means for increasing or diminishing the tension of the same. Between the rear of each draw-head *a* and the bolsters of the car are strong spiral springs *g*, which serve to hold the draw-heads in place and to resist backward pressure on the same.

In operation, when a number of cars are coupled together and a great strain placed on the draw-heads, the springs *c* are pressed together and form cushions to relieve any sudden strain.

Having thus described my invention, I claim—

The herein-described draft-regulator for railway and other cars, consisting of the draw-heads *a*, connected together by suitable rods *b* and separated the one set from the other by intermediate springs *c*, a means for increasing the tension on said draw-heads, and springs arranged at the rear of each, substantially as herein shown and described.

In testimony that I claim the foregoing I hereunto affix my signature this 13th day of January, A. D. 1891.

JAMES M. MAXWELL. [L. S.]

In presence of—

M. E. HARRISON,
C. C. LEE.