

GEORGE B. BRYANT.

Improvement in Railway Car Wheels.

No. 120,489.

Patented Oct. 31, 1871.

Fig. 1.

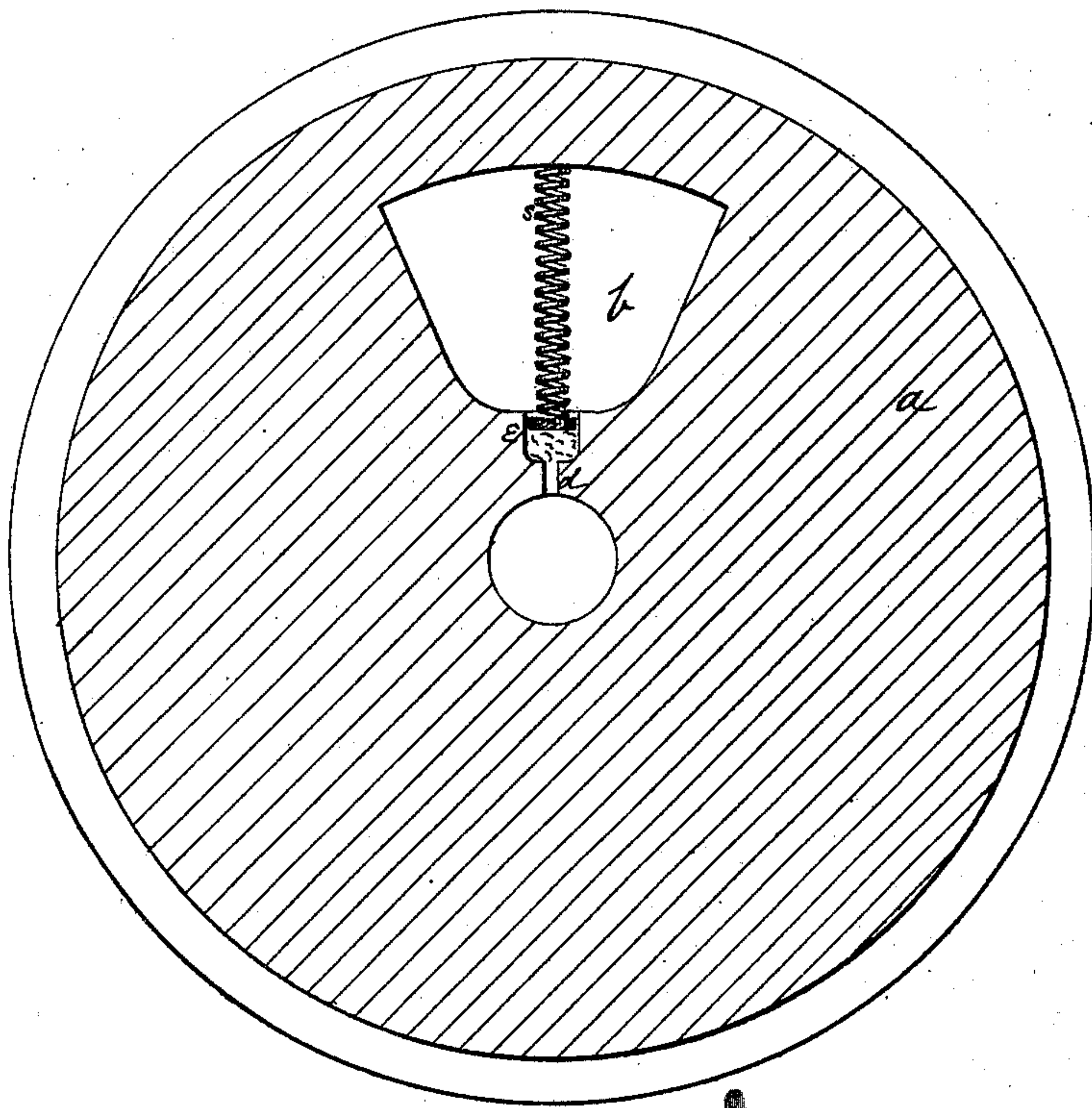


Fig. 2.

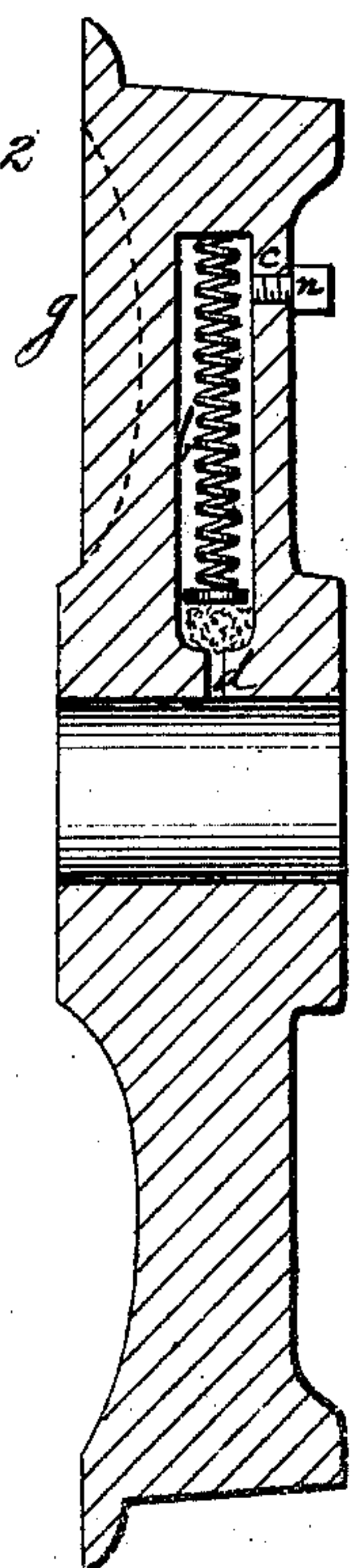
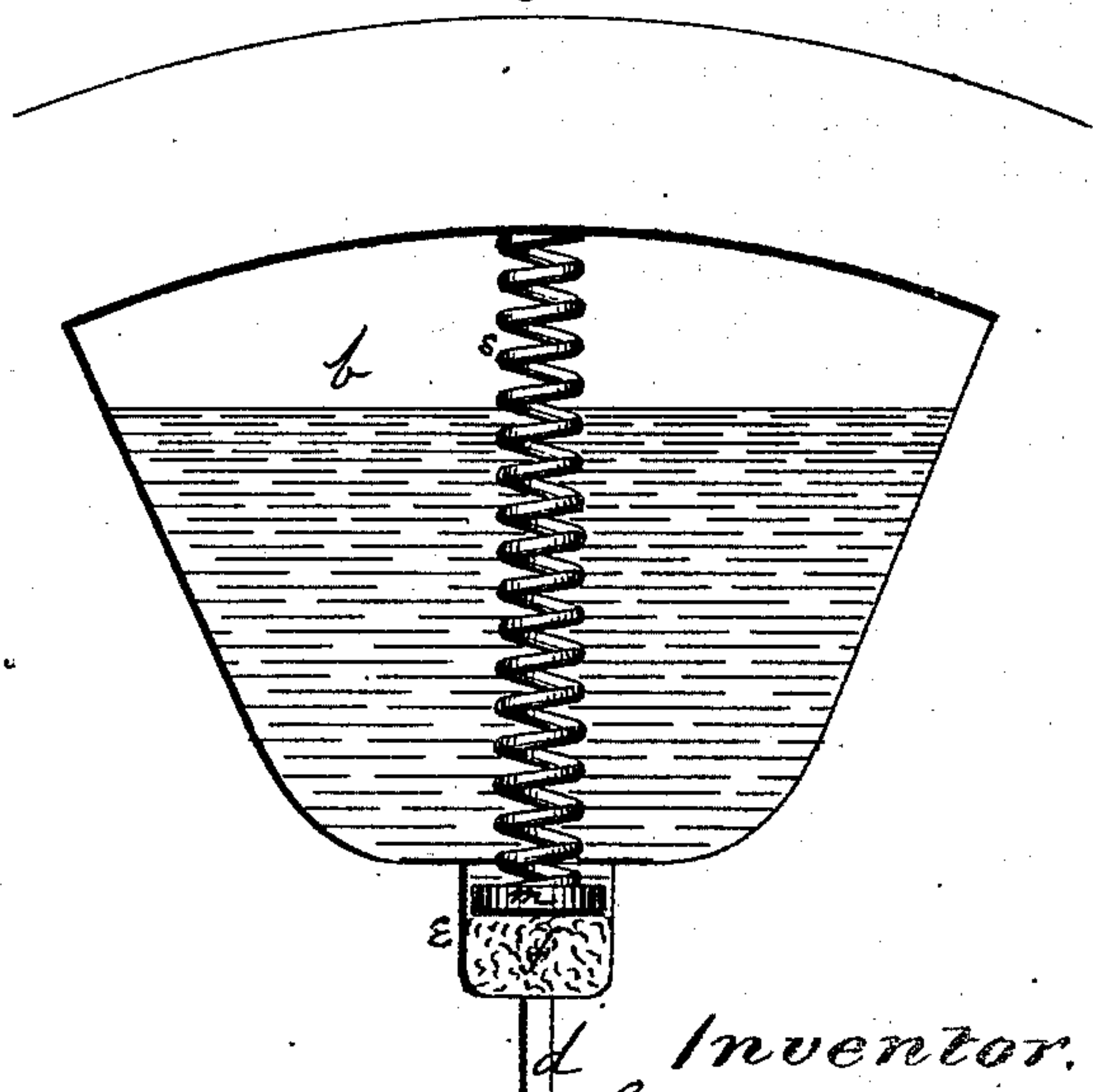


Fig. 3.



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GEORGE B. BRYANT, OF POTTSVILLE, PENNSYLVANIA.

IMPROVEMENT IN RAILWAY-CAR WHEELS.

Specification forming part of Letters Patent No. 120,489, dated October 31, 1871.

To all whom it may concern:

Be it known that I, GEORGE B. BRYANT, of Pottsville, in the county of Schuylkill and State of Pennsylvania, have invented an Improved Car-Wheel and Lubricator; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a vertical section, Fig. 2 a cross-section, and Fig. 3 a detached sectional view.

Similar letters of reference in the accompanying drawing denote same parts.

This invention relates to that class of cast-iron or steel car-wheels which is constructed to revolve upon a fixed axle; and my improvement consists in providing within the body of the wheel itself a lubricator sufficiently large to contain several weeks' or months' supply of oil, and so constructed as to feed said oil slowly and regularly to the bearing.

In the drawing, *a* is the car-wheel provided with a chamber, *b*, to contain the lubricant, which is admitted through a feed-opening, *c*, and discharged upon the journal at the center of the wheel through an outlet, *d*. Above the passage *d* the metal of the wheel is chambered out a little, as shown at *e*, and the chamber is filled with cotton-waste or other suitable substance *f*, which arrests the flow of the oil and allows it to escape slowly and regularly. The waste is held in place by means of a small plate, *m*, pressed down upon it by a spiral spring, *s*. To compensate for the loss of strength which results from the cavity *b* the inner side of the wheel is re-en-

forced at *g*, opposite to the cavity. The feed-opening may be closed by means of a screw-plug, *n*.

The wheel thus constructed is of the same general appearance as other car-wheels, and is equally as strong as any other wheel of the class. The spring, if properly adjusted, will quite effectually prevent the flow of oil when the cars are not in motion, but will yield sufficiently to the vibrations of the wheels when in motion to afford a full supply of oil to the bearing. The whole arrangement is simple, cheap, and durable, and will operate for six months at a time without the necessity of refilling the reservoir, thus saving a very great amount of time and labor to the employés of the company.

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

1. A cast-iron car-wheel having a chamber, *b*, provided with the feed-opening *c* and outlet *d*, and containing within it a packing of cotton-waste or other fibrous substance, *f*, a plate, *m*, which holds the fibrous substance in place, and a spring, *s*, which presses the plate upon the fibrous substance, all constructed and arranged as and for the purposes described.

2. A cast-metal car-wheel provided with a lubricating-cavity, *b*, within it, and a re-enforcement of solid metal, *g*, on the outside opposite to the cavity, substantially as herein set forth.

GEORGE B. BRYANT.

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