

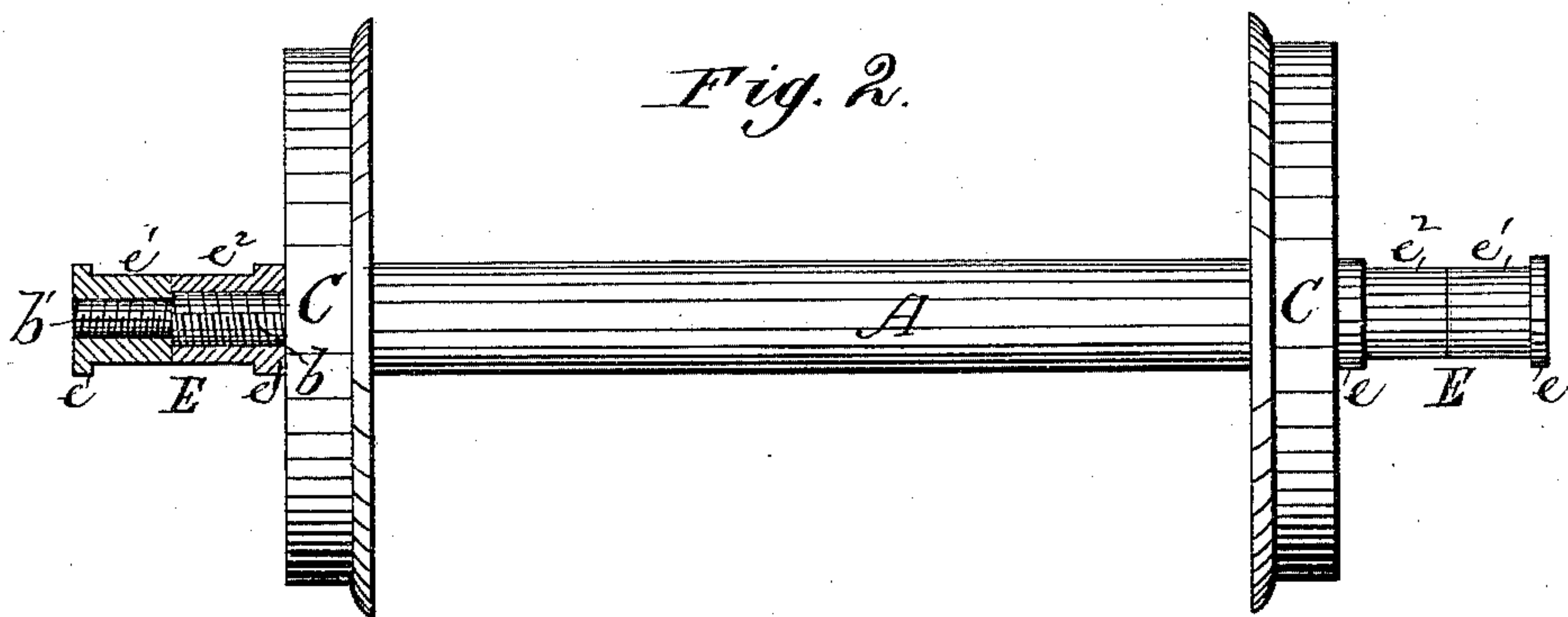
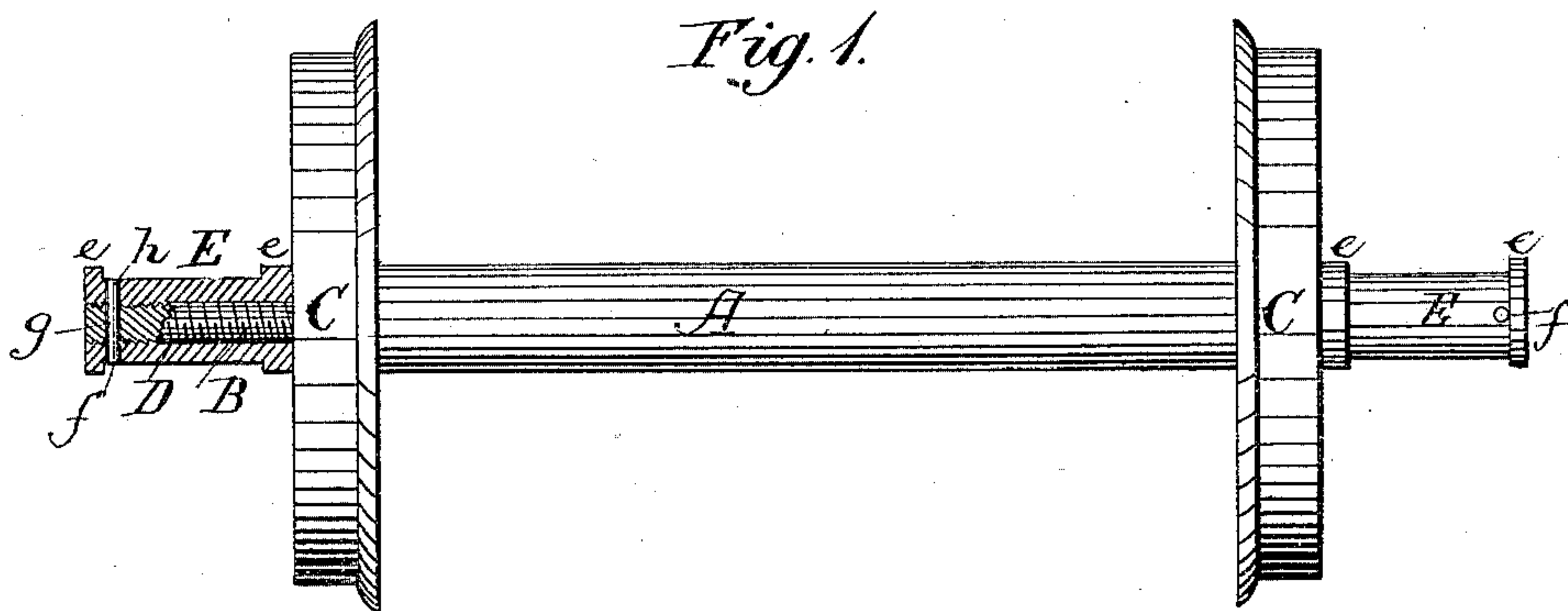
(No Model.)

H. C. ATKINSON.

CAR AXLE.

No. 277,825.

Patented May 15, 1883.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

HENRY C. ATKINSON, OF FRANKLIN, KY., ASSIGNOR OF A PART TO T. B. MCKENZIE & HARRIS, JODIE BLACK, JOHN G. HARRIS, R. B. PHILLIPS, G. S. BLACK, L. J. JONES, AND I. H. & T. M. GOODKNIGHT.

## CAR-AXLE.

SPECIFICATION forming part of Letters Patent No. 277,825, dated May 15, 1883.

Application filed January 30, 1883. (No model.)

*To all whom it may concern :*

Be it known that I, HENRY CATE ATKINSON, of Franklin, in the county of Simpson and State of Kentucky, have invented a new and useful Improvement in Railway-Car Axles, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, forming part of this specification.

The object of this invention is to provide a railway-car axle having removable journals, in order that when the journals become worn the axle may be repaired by placing new journals thereon; and the invention consists in the construction hereinafter described and claimed.

In the drawings, Figures 1 and 2 are elevations, partly in section, showing removable journals or thimbles for car-axes, formed, respectively, in one and two parts.

A indicates an axle having the ends B B, outside the wheels C C, reduced, and provided with a male thread, D. Over these reduced and externally-threaded portions a pair of internally-threaded thimbles, E E, are screwed to form journals. I prefer to form the thimble E in two parts,  $e' e^2$ , as shown in Fig. 2, and provide the axle A with two reduced portions,  $b b'$ , at the ends, which portions are of different diameters, and are formed with a right and left hand thread, respectively, in order that the parts  $e' e^2$  may be screwed thereon in opposite directions. With this construction the said parts  $e' e^2$  will be adapted to serve as jam-nuts to each other, so that the movement of the car in either direction will cause the parts

to bind, and thus prevent them from becoming loose. The thimbles E are formed with collars  $e e$  at the ends, and may also be provided with diametrical perforations  $f$ , which are adapted to register with corresponding perforations,  $g$ , in the reduced parts of the axle, in order that, when they are screwed on, a rivet may be inserted and riveted in the perforations to prevent the thimbles from becoming unscrewed by the motion of the axle. The rivets are shown at  $h$ . The perforations  $f$  are to be countersunk at the outer surface of the thimbles, to provide a smooth surface when the ends of the rivets  $h$  are headed therein.

With the above construction an axle may be used for an indefinite period, since the journals may be repaired, when worn, by simply substituting new thimbles for the old ones.

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

In a railway-car axle, the combination, with the threaded spindle having reduced parts provided with a right and a left hand thread, respectively, of the internally-threaded thimble formed in two parts having right and left hand threads, respectively, which parts are adapted to serve as jam-nuts to each other, substantially as shown and described.

HENRY CATE ATKINSON.

Witnesses:

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