

J. W. BOWER.
Railroad Trucks.

No. 135,762.

Patented Feb. 11, 1873.

Fig. 1.

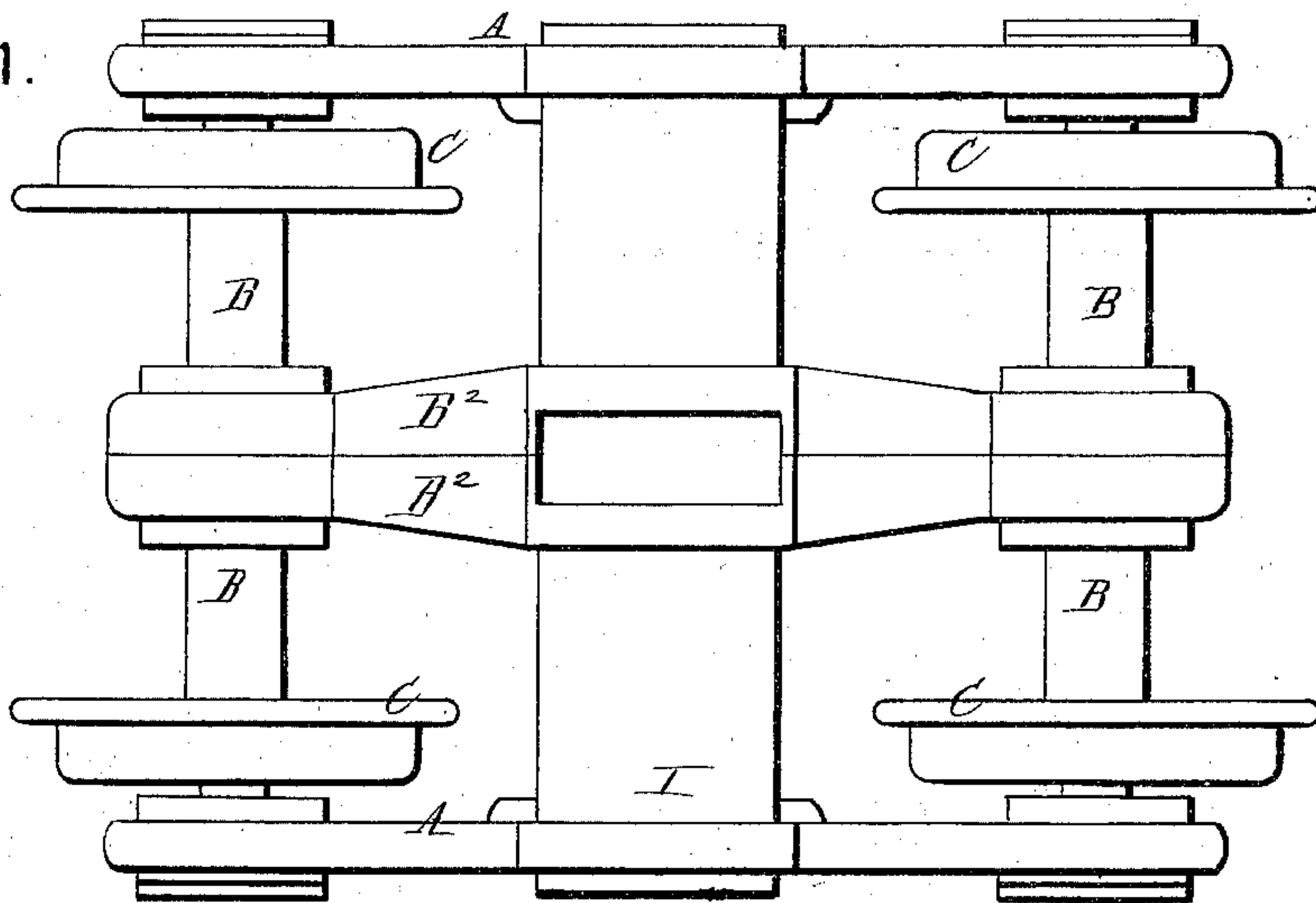


Fig. 2.

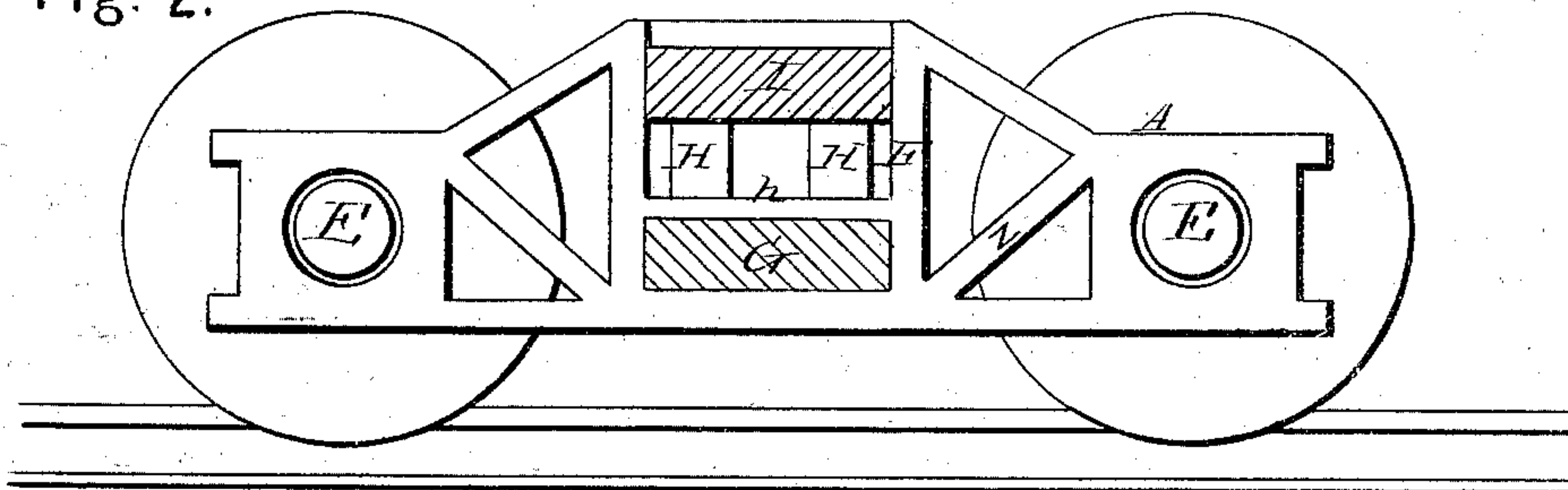
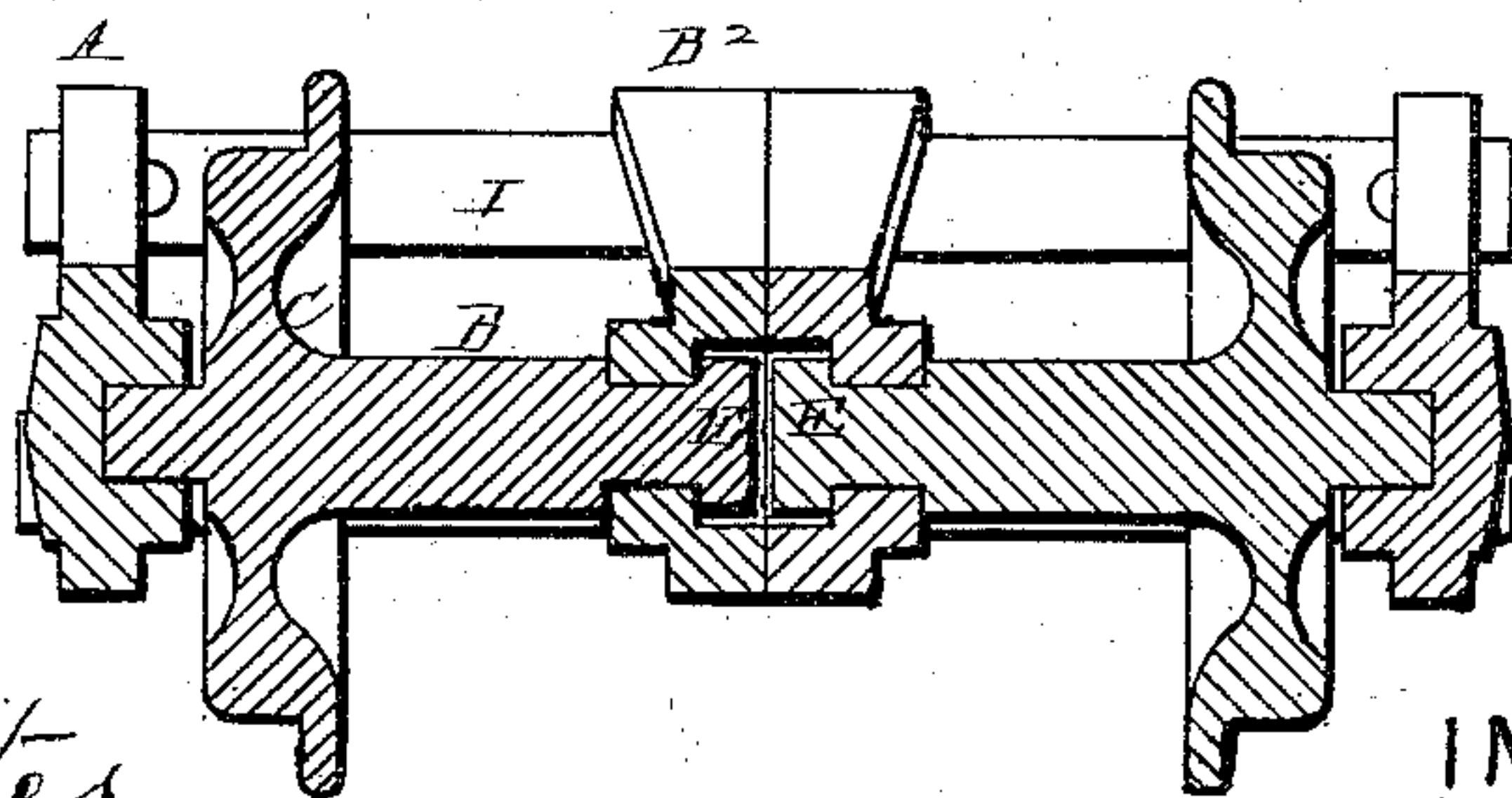


Fig. 3.



WITNESSES
E. A. Bates.
Phil. C. Hasi.

INVENTOR.
James W. Bower.
Clapman & Co.,
Atty.

UNITED STATES PATENT OFFICE.

JAMES W. BOWER, OF GREENCASTLE, INDIANA.

IMPROVEMENT IN RAILROAD TRUCKS.

Specification forming part of Letters Patent No. 135,762, dated February 11, 1873.

To all whom it may concern:

Be it known that I, JAMES W. BOWER, of Greencastle, in the county of Putnam and State of Indiana, have invented a new and valuable Improvement in Independent Railroad Wheels; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a top view of my invention. Fig. 2 is a vertical section of my invention. Fig. 3 is a vertical transverse section of my invention.

This invention has relation to railroad trucks, of which each wheel turns independently of the others; and the novelty consists in the construction and novel arrangement of braced horizontal beams having at each end a journal-box to receive and support the outer ends of independent axles, and provided at the middle with a square opening to receive the transverse beams, as hereinafter more fully set forth.

Referring to the drawing, A designates the side castings of a railroad truck, having diagonal braces Z extending toward the middle, and serving the purpose of supports for the parts G and I, and at each end a journal-box. These journal-boxes receive and support the outer ends of the four independent axles B, to each of which is rigidly secured a wheel, C, with which the axle turns. The inner ends of the axles have their bearings in boxes at the ends of beams or castings B², similar in form to the side castings A, and placed side by side between the latter and secured together by bolts.

A single beam of suitable dimensions may be employed instead of the two marked B².

As each wheel has independent motion, the sliding and excessive friction usually caused in turning curves are avoided.

At the inner ends of the axles grooved bearings or journals are formed, producing caps or heads E, which retain the axles in position. In the middle of each of the beams or castings A B² a large square opening, F, is provided. On the bottom of these openings rests a heavy transverse beam, G. A partition, h, running horizontally through each opening in beams B², divides said opening into two parts, the lower of which corresponds in size with the beam G and prevents the latter from rising. Upon the ends of the beam G rest the India-rubber springs H, supporting the movable beam I, which passes through the upper parts of the openings F, and is connected to the bottom of the car, tender, or locomotive.

I am well aware that independent axles with their wheels are not new, and, therefore, I do not claim such invention.

What I claim as my invention, and desire to secure by Letters Patent, is—

The railroad truck herein described, having the horizontal braced beams A B², holding at each end a journal-box, and provided at the middle with a square opening, F, to receive the transverse beams G and I, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JAMES W. BOWER.

Witnesses:

GEORGE H. McKEE,
CHARLES W. DAGGY.