

(No Model.)

W. M. ABBOTT.

BRAKE SHOE.

No. 277,098.

Patented May 8, 1883.

Fig. 1.

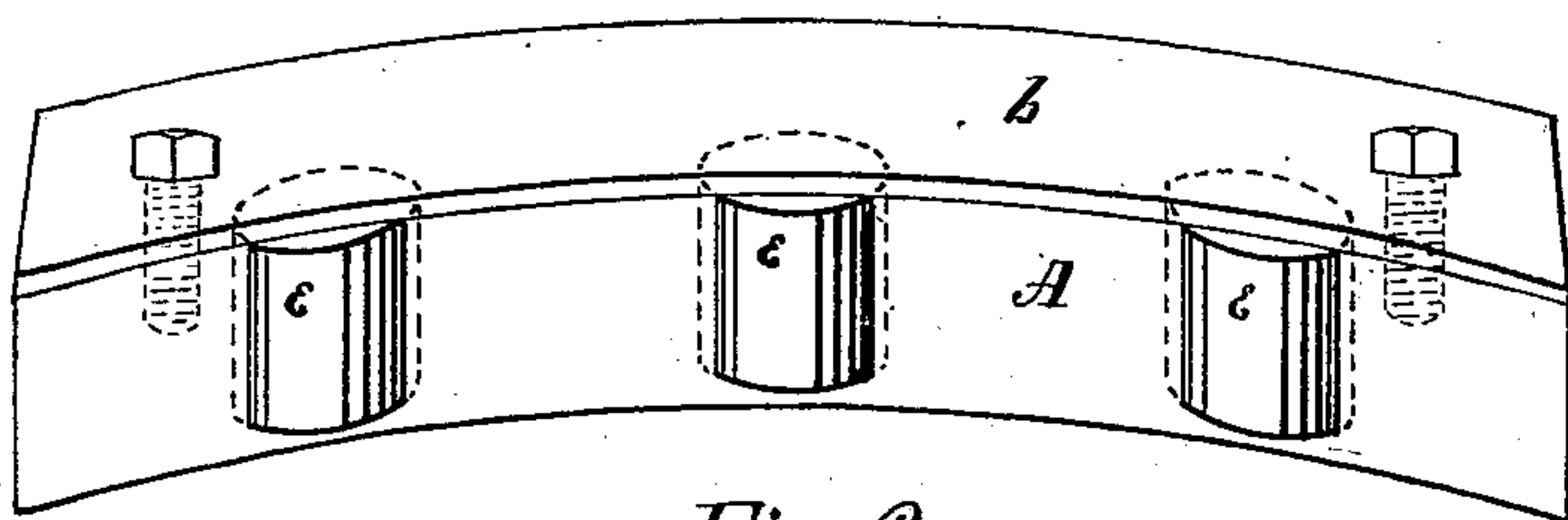


Fig. 3.

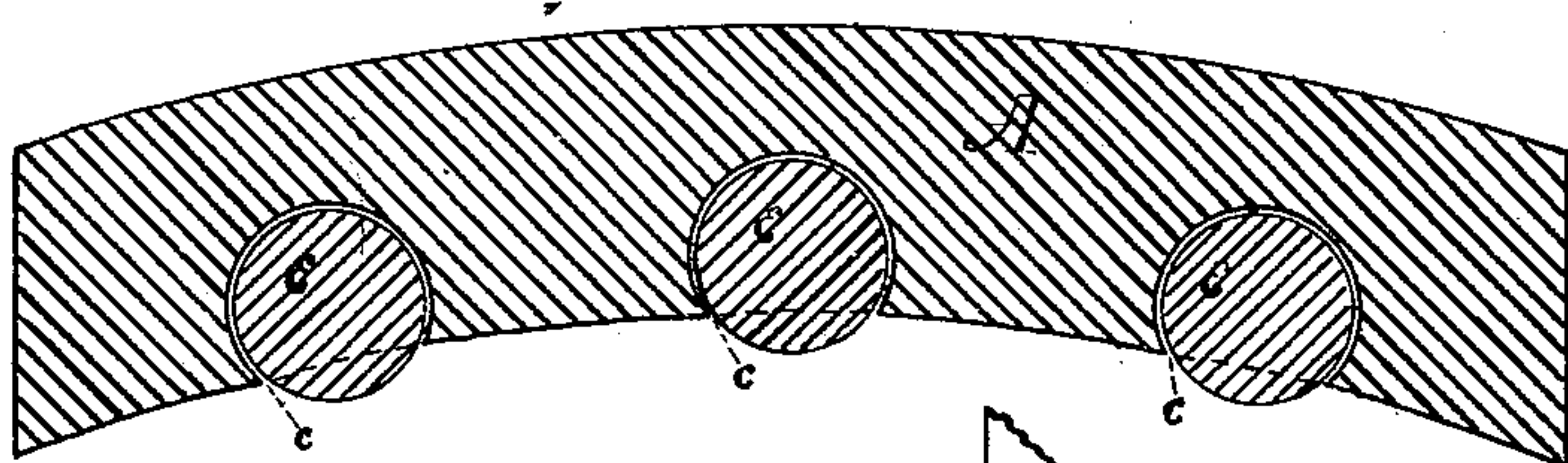


Fig. 4.

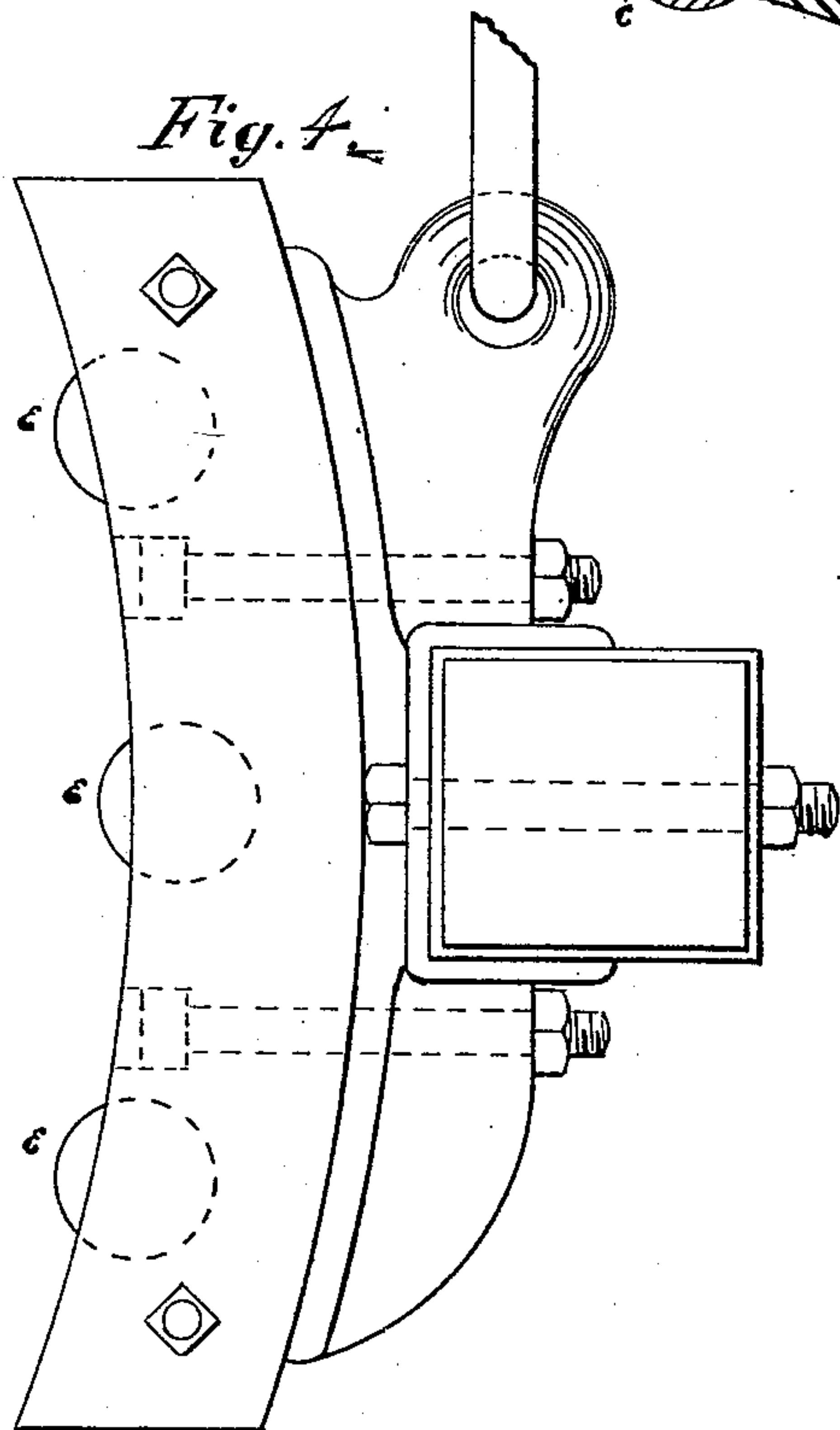
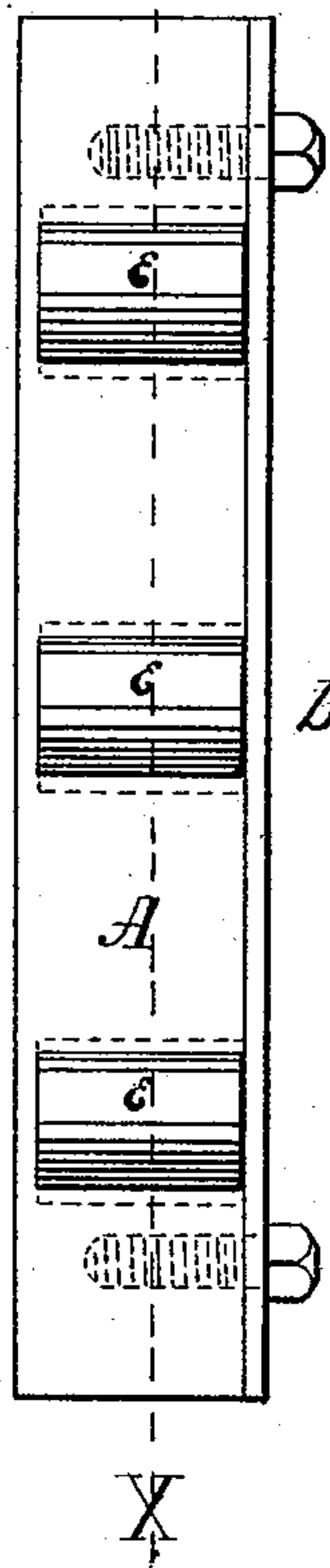


Fig. 2.



WITNESSES:

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BRAKE-SHOE.

SPECIFICATION forming part of Letters Patent No. 277,098, dated May 8, 1883.

Application filed March 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, WARREN M. ABBOTT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Car-Brakes, of which the following is a specification.

My invention relates to what are known as or termed "brake-shoes," and has for its objects to prevent the wheels of the car or other vehicle to which my brake may be applied from slipping on the rails of the track when the brakes are set; to prevent the uneven wearing away of the wheel-rim caused by the sliding of the wheels on the rails after the brakes are set, and thus obviating much of the jolting, thumping motion of the cars as they pass over the track, which irregular motion is caused by the uneven surfaces of the wheel-rims, that are made uneven by the slipping on the rails above referred to. These objects are attained by attaching to the main part of ordinary brakes, in place of a flat face now in use, my improvement, which is a brake-shoe whose mechanism is described in this specification, and which is fully illustrated in the annexed drawings, to which reference is made.

In each figure of the drawings the same letters refer to corresponding parts of my invention.

Figure 1 is a perspective view of the brake-shoe detached from the brake. Fig. 2 is an elevation of the same. Fig. 3 is a vertical section of the same on line *x x* of Fig. 2. Fig. 4 shows the brake-shoe attached to the brake as in ordinary use.

In the drawings, *A A* represent the body of the brake-shoe proper, constructed of steel or of such other material as may be thought suitable, and is of the usual and well-known forms of construction.

b b is a plate or cap securely attached to the

side of shoe *A A*, the object of which is to allow the insertion of metal friction-rollers into the face of the part *A A*, and after such rollers have been so inserted to retain them securely in their positions.

c c c represent the slots or openings in the face of the brake-shoe for the purpose of receiving the friction-rollers. These slots or openings are so made as to allow a portion of the rollers to project from the surface of the shoe and leave them free to press against the rim of the wheel.

c c c represent the friction-rollers, which may be made of steel or other suitable material, and of such diameter and length as the size of the wheel upon which they are to act shall require.

When the brake is set the friction-rollers act upon the rim with sufficient friction to cause the train to cease its motion, and by the rotation of the rollers the wheels of the car are allowed to revolve slowly over the rails, instead of slipping along the rails, as is often the case with flat brake-shoes, while these rollers being constructed of metal without arbor or axle, render the shoe durable, strong, cheap, and easy of construction.

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

A brake-shoe constructed of any suitable material, having set into its acting or pressure face friction-rollers of any suitable material, inserted in slots or openings in the face of the shoe, and arranged, acting, and secured in the manner and for the purposes substantially as set forth.

WARREN M. ABBOTT.

Witnesses:

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