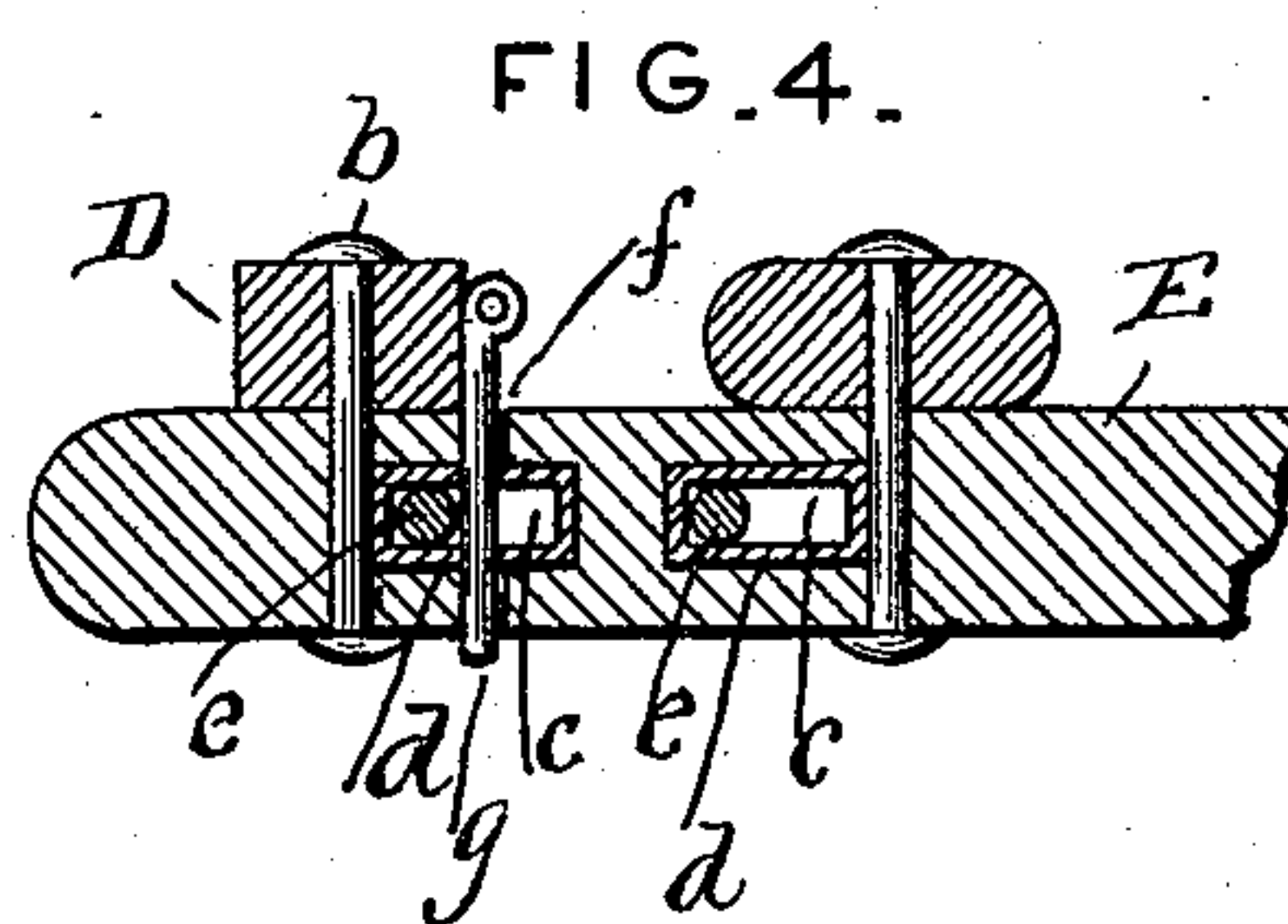
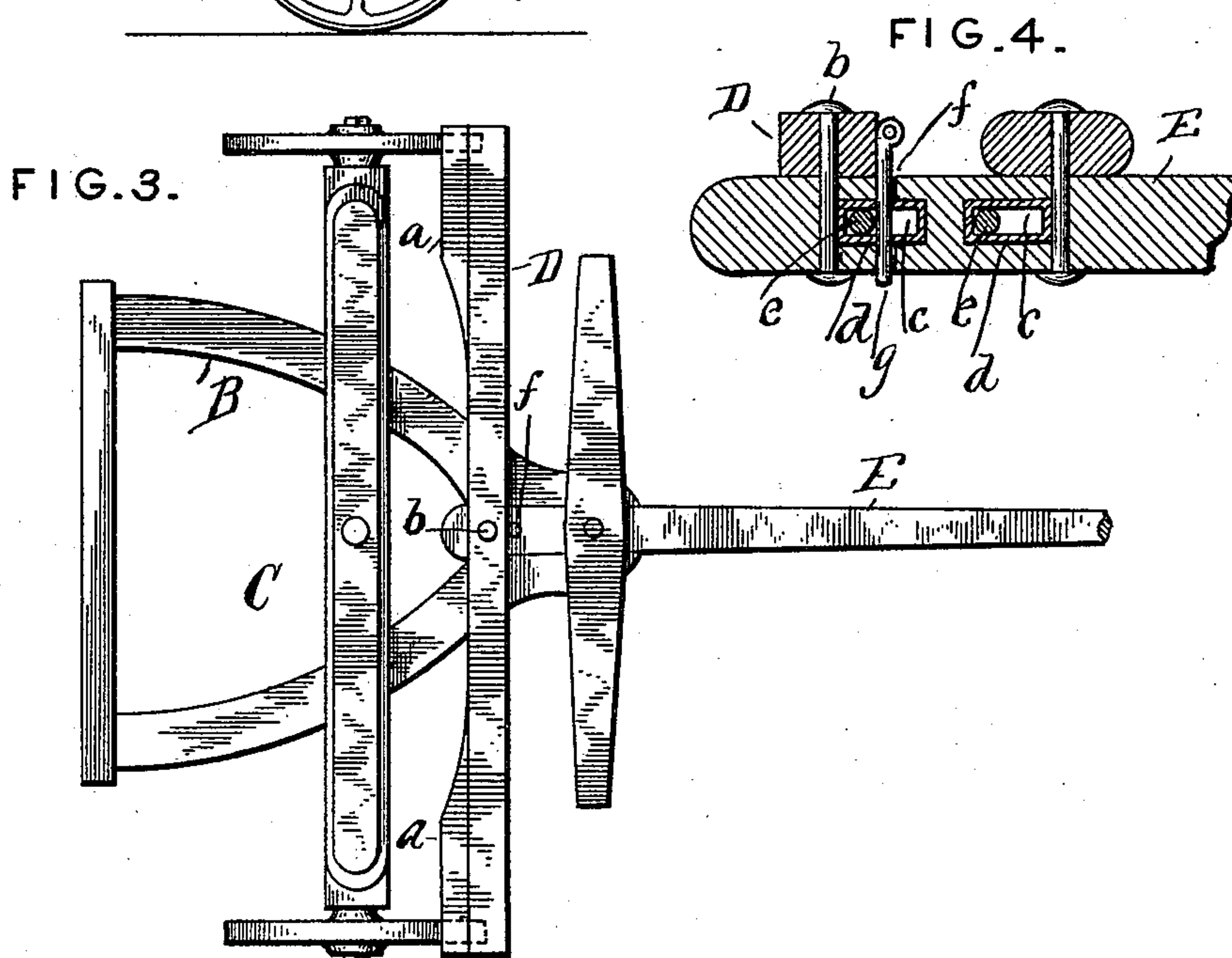
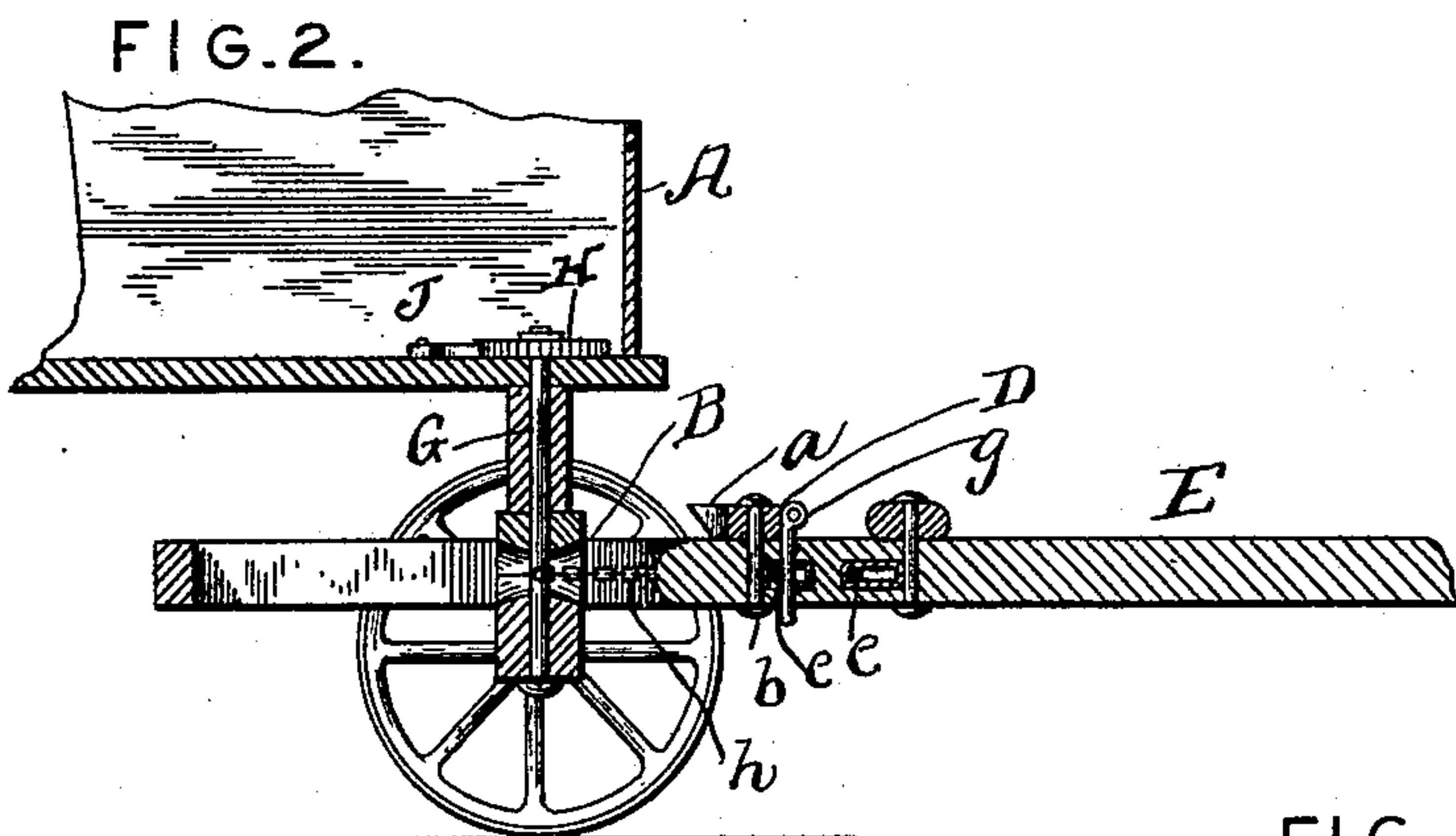
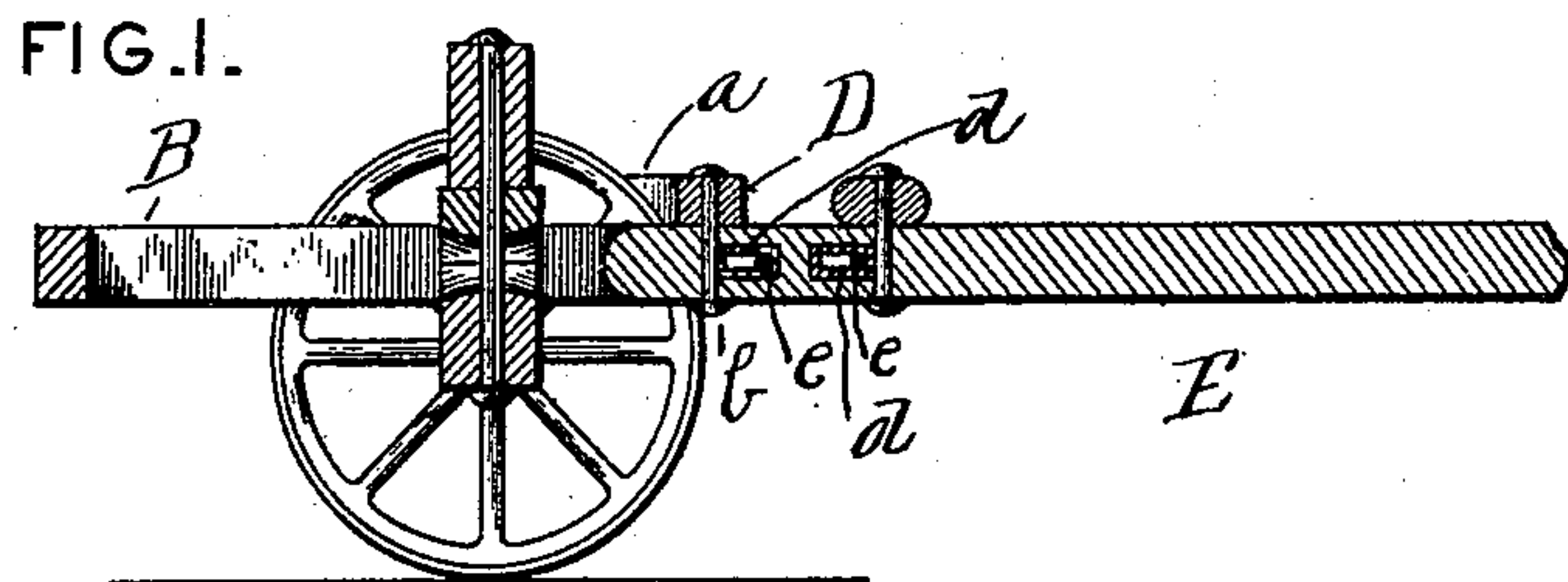


(No Model.)

B. A. DAVIS.
AUTOMATIC VEHICLE BRAKE.

No. 396,030.

Patented Jan. 8, 1889.



Witnesses.

Harry L. Amer.
E. Everett Ellis

Inventor,

Benjamin A. Davis
By his Attorney
Ym. C. W. Squire

UNITED STATES PATENT OFFICE.

BENJAMIN ANSLEY DAVIS, OF BERMUDA, ASSIGNOR TO GEORGE DAVIS, OF
PETERSBURG, VIRGINIA.

AUTOMATIC VEHICLE-BRAKE.

SPECIFICATION forming part of Letters Patent No. 396,030, dated January 8, 1889.

Application filed November 7, 1888. Serial No. 290,230. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN ANSLEY DAVIS, a citizen of the United States, residing at Bermuda township, county of Chesterfield, and State of Virginia, have invented new and useful Improvements in Automatic Vehicle-Brakes, of which the following is a specification.

This invention relates to certain new and useful improvements in automatic brakes for wagons and other vehicles; and it consists, substantially, in such features of construction, arrangement, and combination of parts as will hereinafter be more particularly described, and pointed out in the claim.

The object of the invention is to simplify the construction and cheapen the cost of manufacture of the several parts, and to so combine and arrange said parts that their action shall be positive and effective.

The invention also has other objects in view, as will more fully hereinafter appear when taken in connection with the accompanying drawings, wherein—

Figure 1 is a longitudinal sectional view of only as much of the running-gear of a vehicle as is necessary to illustrate one part of my invention. Fig. 2 is a similar view to illustrate further constructions and arrangement of devices preferably employed in the practice of my invention. Fig. 3 is a top or plan view of Fig. 1, and Fig. 4 is a sectional and detail view of certain parts on a slightly-enlarged scale to the remaining figures.

In carrying my invention into effect I form in the end of the pole of the vehicle that connects with the hound of the fore axle preferably two oblong slots or openings, and passing through these openings, as well as the two sides of the hound, are bolts or rivets, which, as will be readily apparent, permit the pole to have a certain amount of longitudinal play. I also form in the same end of the vehicle-pole an opening passing down through the same at right angles to the slots. This opening I locate about centrally of preferably the slot nearest the axle, and the said opening is for the purpose of receiving a pin or bolt, so as to render the brake inoperative at times when it is desired to back the team or vehi-

cle. I further resort to a combined chain and ratchet-and-pawl mechanism so connected with the inner end of the pole of the vehicle that the brake can be drawn against the wheels with greater pressure and be locked in such manner as to effectually act to prevent the running away of the team.

Reference being had to the accompanying drawings by the letters marked thereon, A represents a portion of the body of a wagon or other vehicle, and B represents the hound of the fore axle, C.

D represents the brake-bar, having preferably secured to its ends, at the side adjacent to the wheels, suitable metallic brake-shoes, *a a*, which prevent rapid wear of said bar. This brake-bar is firmly secured at its center to the end of the vehicle-pole E, as will be seen at *b*, and it will be apparent that when said pole is moved backward or inward the said brake-bar will be forced against the wheels, and thereby prevent them from turning.

Formed in the pole of the vehicle at near its inner end, and passing through the same from side to side, are preferably two oblong slots or openings, *c c*, which openings I preferably line with metal boxes *d d*, so as to prevent wear of said pole. Passing through each opening *d* is a bolt or pin, *e*, which serve to attach the pole to the hound and permit of a longitudinal play or movement back and forth. Also passing through the pole at right angles to the openings *c c* is another opening, *f*, through which a pin or bolt, *g*, is passed when it is desired to prevent the brake-bar from operating, as is the case when it is necessary to back the vehicle or team. Figs. 2 and 4 better illustrate the purpose and operation with reference to this feature of the invention.

For the purpose of obtaining greater pressure of the brake-bar against the wheels, I employ a chain, *h*, one end of which is attached to the inner end of the pole E and the other end attached or secured to the bolt G, passing through the bolster and floor of the body A, the said bolt G being provided on its upper end with a ratchet-wheel, H, engaged by a pawl or dog, J.

From the foregoing description it will be

seen that when a downgrade is encountered the backward strain exerted by the team upon the pole will cause said pole to move back upon the bolts or pins *d d*, and in this way
5 the brake-bar will be carried against the wheels. As soon as level ground is reached the forward movement or pull of the team will again draw the pole outwardly and the brake-bar will be moved from the wheels.

10 By giving to the ratchet and its bolt a sufficient turn the brake can be effectually locked against the wheels.

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

The combination, in a wagon or other vehicle, of the pole having the slots or openings *c c*, the pins or bolts *e e*, passing through said openings, the brake-bar, the chain, and pawl and ratchet connecting with said pole, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

BENJAMIN ANSLEY DAVIS.

Witnesses:

CHAS. B. MANN,
J. H. MEACHAM.