

(No Model.)

R. P. GARSEED.
TRACK BUFFER.

No. 318,462.

Patented May 26, 1885.

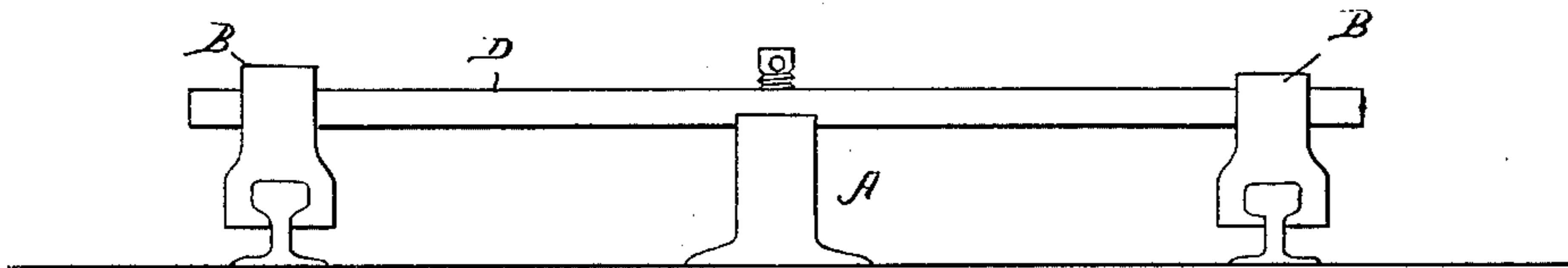


Fig. 1.

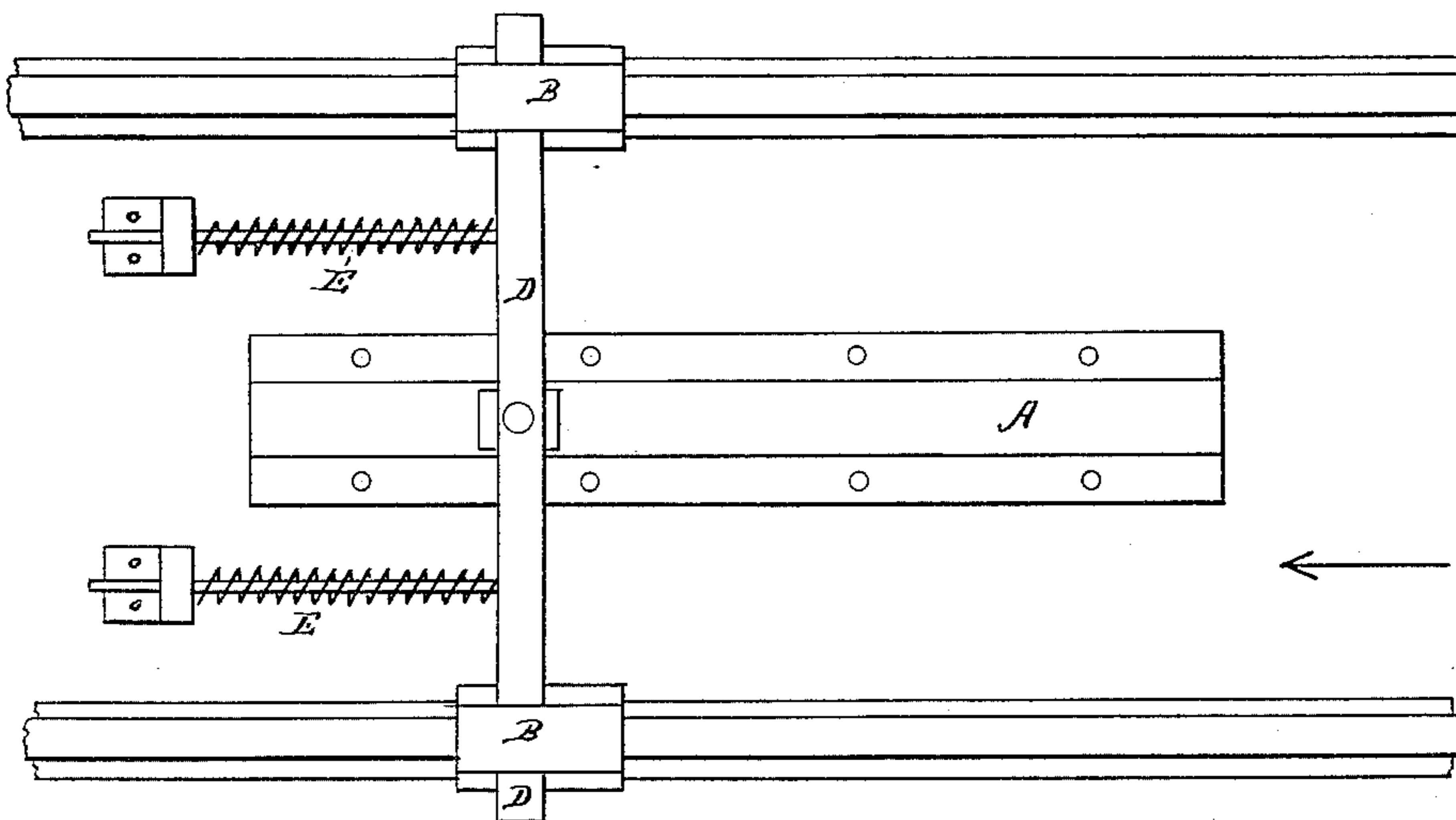


Fig. 2.

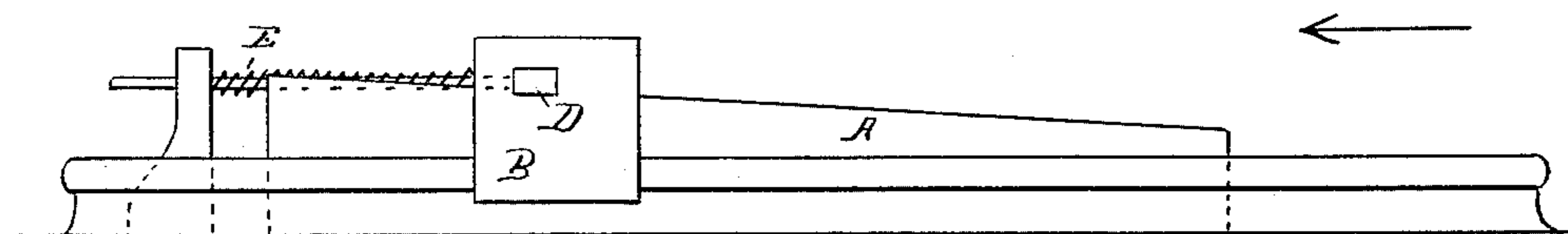


Fig. 3.

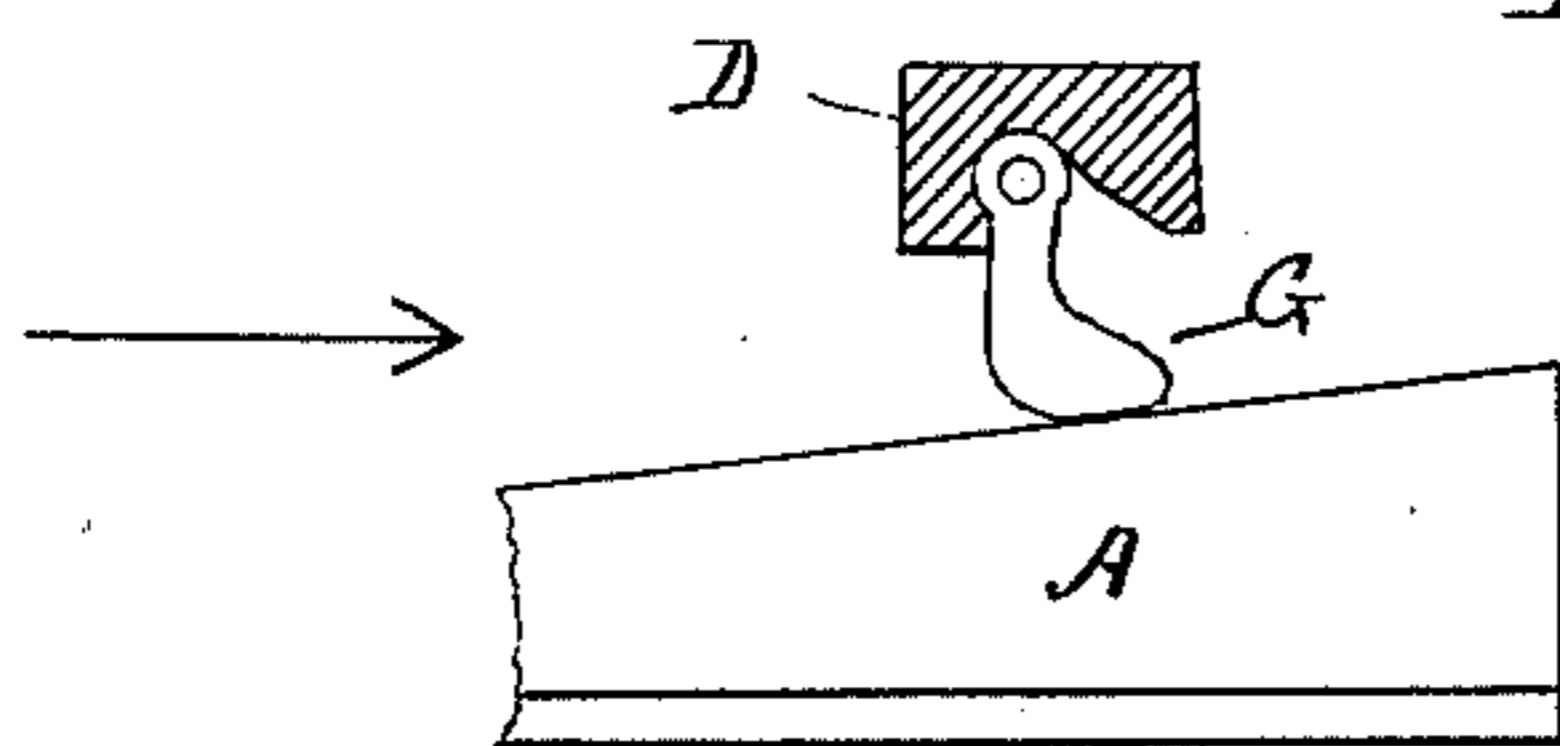


Fig. 4.

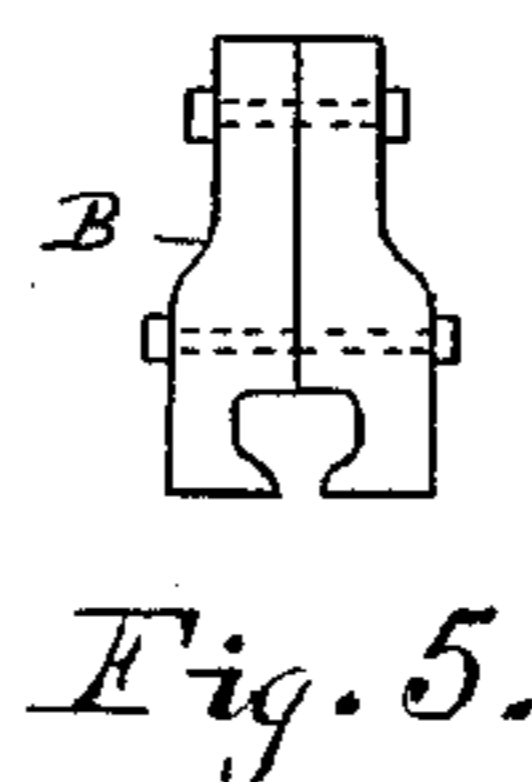
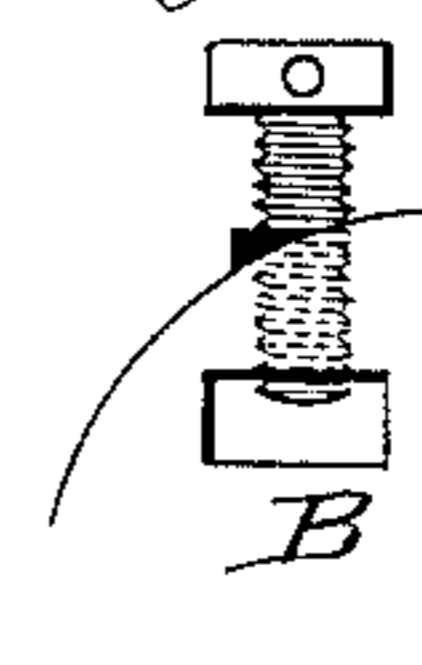


Fig. 5.

Fig. 6.



WITNESSES:

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TRACK-BUFFER.

SPECIFICATION forming part of Letters Patent No. 318,462, dated May 26, 1885.

Application filed November 28, 1884. (No model.)

To all whom it may concern:

Be it known that I, ROBERT P. GARSED, a citizen of the United States, and a resident of Norristown, Montgomery county, and State of Pennsylvania, have invented a new and useful Improvement in Track-Buffers, of which the following is a specification.

The object of my invention is to furnish an improved and reliable buffer, in whole automatic or part hand operation, to be used at the terminus of railways in arresting motion of a moving train, and while the major part of the device may be covered by a previous patent to me, yet the additions are novel and recommending features.

In the accompanying drawings, forming part of this specification, and in which similar letters of reference indicate like parts throughout the several views, Figure 1 represents an end view of the device; Fig. 2, a plan of the same; Fig. 3, a side view of the device; Fig. 4, a side view of part of the friction-bars with a cam adapted to slide with bar D; Fig. 5, a modification of the clamped projections or shoes of the tracks; and Fig. 6 shows a view of the set-screw going through top of projections B, but which in Figs. 1 and 2 is shown through bar D. The hole shown through the top or head of this screw is to receive a rod by which it may be turned.

A, Fig. 1, represents a friction-bar with an inclined face, and B are clamped projections or shoes upon the rails, and adapted to slide thereon.

D is a friction-bar, held by these shoes when sliding upon the face of A.

G is a cam, fixed to bar D, and E are springs, whose purpose is mainly to return the device to its normal position after being operated by a moving train.

The operation of the device is as follows: A train, locomotive, or car coming in the direction of the arrow, Figs. 2, 3, and 4, the face of the first wheels or the end of the pilot (as the pilot or other projecting body could engage directly with bar D) abut against the shoes B or the bar D, and cause these parts to move forward, with the result that the friction between bar A and D increases as the train, locomotive, or car advances. Friction be-

tween bar D and projections B is also produced where these parts engage, and when space is allowed in the openings in these projections, whereby said bar would rise upon the advance of the device, such a condition of the parts would as well be productive of friction, and whether the openings are vertical or slanting; and so between the supporting-rails and projections B, friction is also produced by inward tendency of bar D. Upon such abutting of the train, &c., the bar D, going forward, causes cam G, which supports rod D upon A, to assume a perpendicular position, and thereby force the center of rod D upwardly, and thus produce by this tension great pressure upon A, the ends of rod D, of course, in a degree moving inwardly to allow of such rise. When the device is at the end of its throw, and the pushing force of train is withdrawn from D, the cam G, by turning in its socket, allows D to lower and the springs return the device to its normal position; or the device may be so returned by hand.

In Fig. 1 I show a screw through bar D, which may be used on top of shoes B, to put bar D to a required tension; or it may be used in its present position in lieu of cam G, after the rod D is advanced to relieve it of its tension. This rod may also be supported by not passing completely through projections B, and also pins may be passed through its inner or outer ends to better keep it in place, or where it engages with bar A it may have downwardly-projecting sides to serve the same purpose.

In Fig. 2 I show a plate beneath friction-bar D, between the end of screw and bar A, to receive the pressure of said screw. In Fig. 5 the clamped projections are in parts, and held together upon the rails by bolts running through them, as shown.

It will be suggested that the device may be operated in different ways--as, for instance, projections, or the projecting sides of the pilot might so engage; also, instead of bar D yielding to pressure brought upon it, the top of bar A might so be made to yield; also, instead of movable cam, the bar D could be made cam-shaped where it engages with bar A, with its ends passing through projections B

so shaped as to allow of its turning, and, again, it may be returned to its normal position by levers adjusted to the same, and while bar A may be flat upon its surface it can be so used, 5 though with less friction. An offset or shoulder can also be put at its lower end upon its face, which upon the starting of the device might better cause a perpendicular position of the cam G. These mechanical changes I 10 take as equivalents.

As it is apparent the device may be operated upon one rail with one projection and with two inclined bars A, it is intended in the claims that the elements, whether in singular 15 or plural number, shall be the same.

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

1. In combination with supporting-rails, 20 and fastened thereto and adapted to slide thereon the projections B, supporting a friction-bar, D, in a manner to allow of its being raised or lowered when bearing upon the inclined face of bar A, and said bar A, substantially as and for the purposes set forth. 25

2. In combination with supporting-rails, and adapted to slide thereon the projections

B, with openings adapted to support friction-bar D and allow it to raise or lower, said friction-bar D, and an inclined-faced friction-bar, 30 A, substantially as and for the purposes set forth.

3. In combination with supporting-rails, and adapted to slide thereon the projections B, supporting a friction-bar, D, the bar A, receiving pressure from bar D, and a cam adapted to release the friction-bar, from engagement, 35 substantially as and for the purposes set forth.

4. The supporting railway-tracks and a sliding supporting device with a friction-bar, D, 40 supported thereby, the friction-bar A, and a cam so used in combination as to cause the disengagement of the friction-bars, and a spring, E, adapted to return the device to its normal position. 45

5. In combination, the friction-bar A, with an inclined side, the supporting projections B, and the bar D, with screws to regulate its tension, substantially as and for the purposes set forth.

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Witnesses:

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