

(No Model.)

R. P. GARSEED.

BUFFER.

No. 308,069.

Patented Nov. 18, 1884.

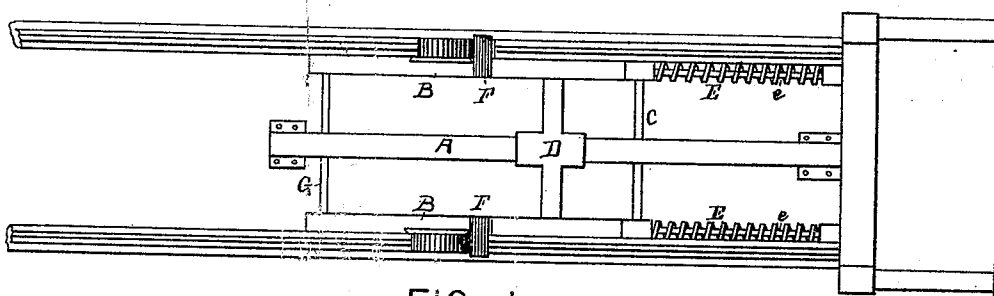


FIG. 1.

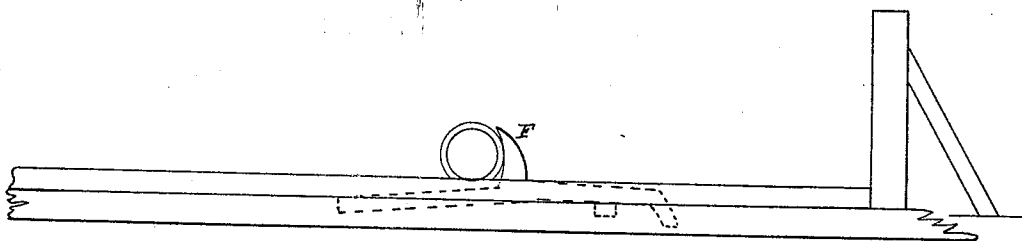


FIG. 2.

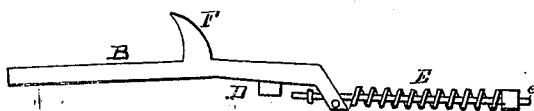


FIG. 3.



FIG. 4.



FIG. 5.

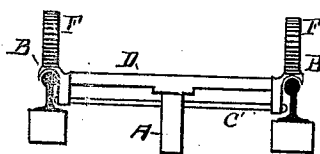


FIG. 6.

WITNESSES:

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UNITED STATES PATENT OFFICE.

ROBERT P. GARSED, OF NORRISTOWN, PENNSYLVANIA.

BUFFER.

SPECIFICATION forming part of Letters Patent No. 308,069, dated November 18, 1884.

Application filed October 23, 1882. (No model.)

To all whom it may concern:

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

The object of my invention is to provide a device to be situated at the end of a railroad-track, either of a main line at a station or depot or of a siding, to arrest the progress of a train which may be coming to said end with too great a speed.

In the accompanying drawings, Figure 1 represents a plan of my invention; Fig. 2, a side view; Fig. 3, a side view of my depressor; Fig. 4, an end view of its heel; Fig. 5, a side view of the friction-bar, and Fig. 6 an end view of my invention.

Near the end of the railway and along each rail, upon the inside, I have a depressor or lever, B, the top of which is preferably grooved to receive the flange of the wheels. These levers are secured together by rods C and G, and they also rest upon a bar of iron or steel, D, the middle of which rests upon an iron or steel friction-bar, A, which has a slot in it to allow the rods C and G to pass in their motions. Against the heels of the levers B, and guided by the rods C, spiral springs E bear, whose purpose is to return the levers B to their first or operative position after having been acted upon by a train. The levers B have upon their top a stop or projection, F, against which the treads of the wheels run and are stopped, and these levers at one place extend over the rail and are bent around the same, as shown in Fig. 6, to better secure the device in position.

The operation of the device is as follows: A train runs with considerable speed toward the end of the track, and the flanges of the first wheels upon the locomotive (or first car, if the locomotive be detached or at the rear of the train) run up the levers B until they strike the projections F upon the levers B. As soon as the flange begins to run along the lever the lever bears heavily upon the bar D, the middle of which rests upon the friction-bar A. The wheels, striking against the pro-

jections F, cause the levers to move up the track, and with them the bar D, the friction between which and the bar A increasing as the train advances, the consequence being that the moving train is stopped very rapidly. When the levers B are moved up, the spiral springs E are compressed, and they also assist in checking the train; but their principal use is to return the levers B to their first position. The clamps or projections of the levers B will also serve to produce friction, as well as keep the rails in place, and the connecting-rod G, which connects the forward ends of the depressors, may also serve to produce friction by bearing upon the lower side of the slot in the friction-bar A.

It will be seen that the depressor or lever B may be placed in the center of the track between two friction-bars with rod D, and be operated by the pilot or other part of the train instead of wheels. It will further be seen that the ends of the pivot-rod C may pass through the web of the rails, which could be slotted to allow of the motions of said rod.

It will be seen that by removing one of the levers B and placing the other parallel with and over the bar A, with a bifurcated end extending downwardly to engage with rod C in its proper way, the pilot of engine, in place of the wheels thereof, may operate the device.

Having thus described my invention, what I claim is—

1. In a buffer, in combination with the tracks of a railroad, the levers B, the rod D, and the bar A, operated substantially as described, as and for the purposes set forth.

2. In a buffer, the combination of the bar A with the horizontal slot, the rod G, passing through said slot and permitted to have a forward and backward movement, and the levers B with projections to receive the impact of the engine or train, as and for the purposes described.

3. As a device for stopping a train or other moving body, the combination of the levers B with projections, the friction-bar A, rod D, and spring E.

4. In a buffer, the bar A with inclined side and a horizontal slot, in combination

with the bar D and rod C, substantially as and for the purposes set forth.

5 In combination with the tracks of a railroad, and adapted to be operated by a moving train, the bars A and D, (the former with a horizontal slot,) the lever or levers B with connecting-rod C, passing through said slot and adapted to retain them in place and allow their

forward and backward movement upon their operation, substantially as and for the purposes set forth.

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Witnesses:

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