(No Model.)

W. E. SHEPARD.

TRACK BRUSH HOLDER.

No. 565,144. Patented Aug. 4, 1896.

Fig. 1.

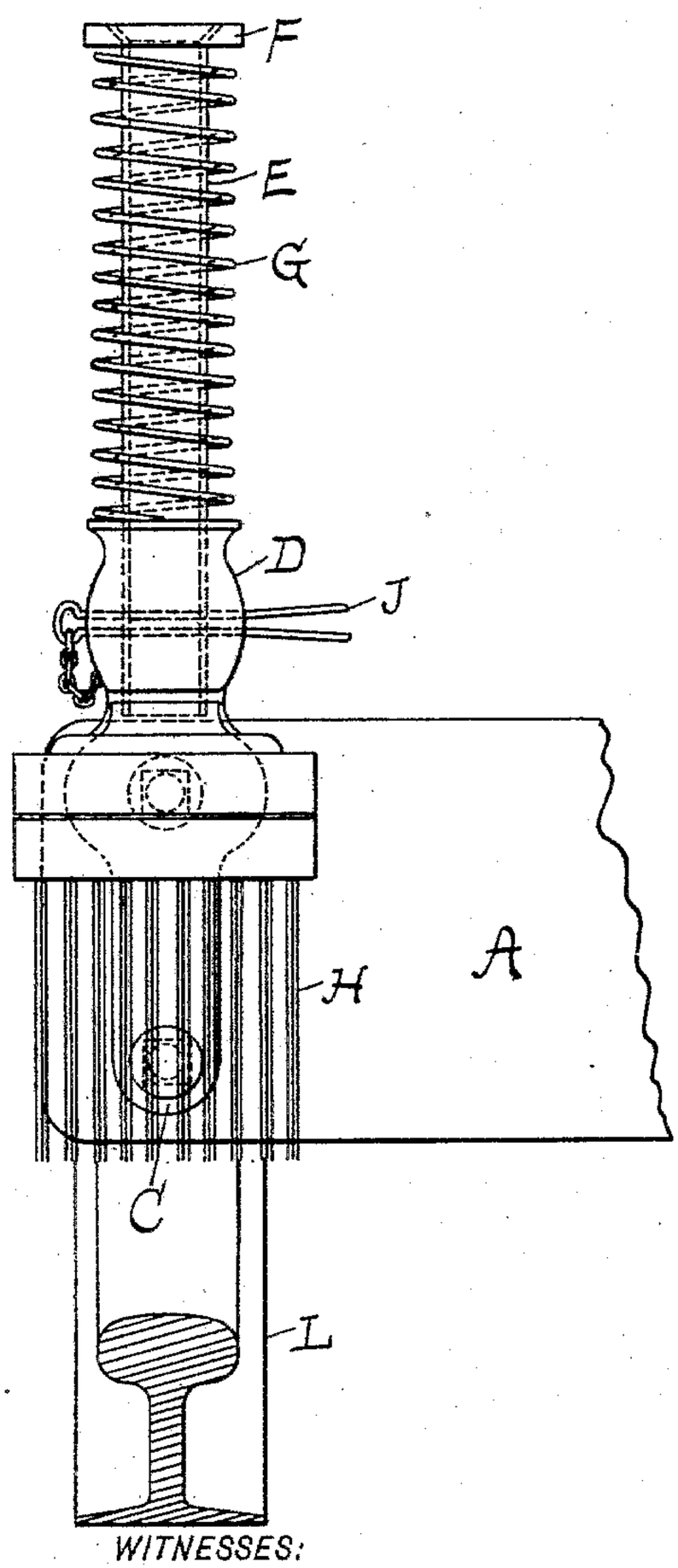

Fig. 2.

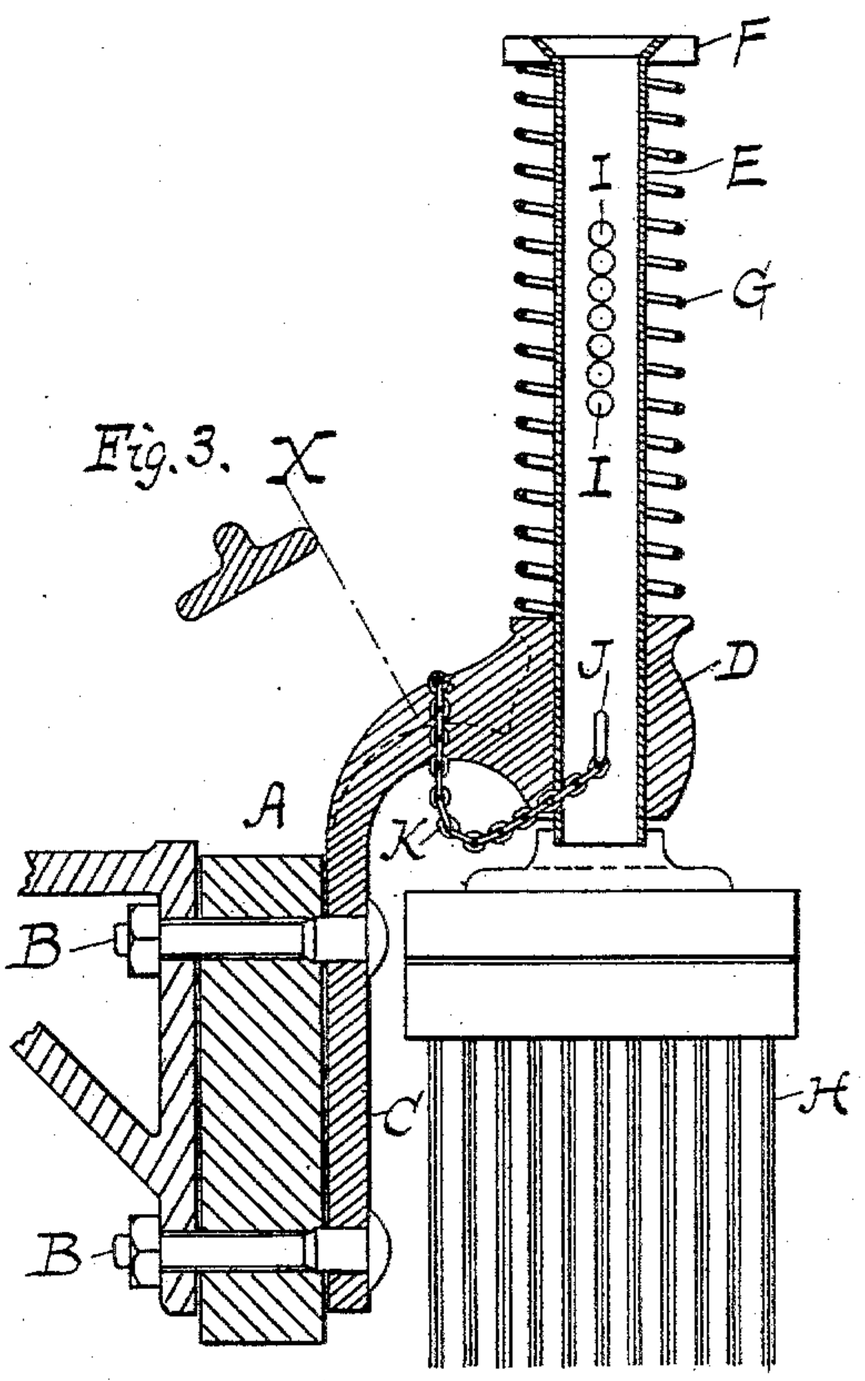

Fig. 3.

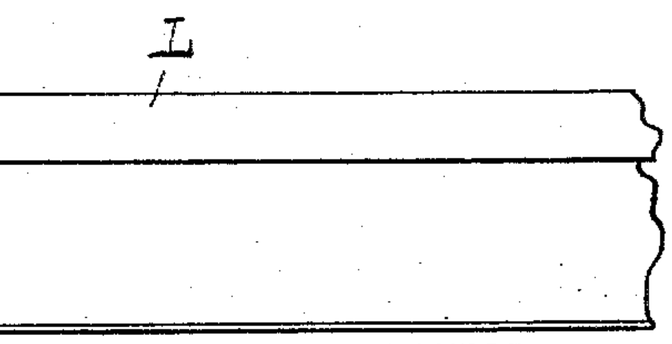

Fig. 4.

WITNESSES:

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TRACK-BRUSH HOLDER.

SPECIFICATION forming part of Letters Patent No. 565,144, dated August 4, 1896.

Application filed January 9, 1896. Serial No. 574,831. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. SHEPARD, a citizen of the United States, and a resident of Long Island City, Queens county, New York, have invented new and useful Improvements in Track-Brush Holders, of which the following is a specification.

My invention relates to the mechanical construction of means for cleaning the track of an electric-railway system from snow or dust or other material, so that the current may pass with the least possible resistance from the wheels to the rails.

The invention relates more particularly to the elements for supporting a brush and regulating its distance from the rails. Heretofore those devices for a similar purpose which have been in use have the serious objection of requiring much time and labor for their adjustment. My device is of such a nature that it may be adjusted very quickly, and yet the construction is much simpler than the old form.

In order that the device may be understood in all its details, the accompanying drawings are annexed.

Figure 1 is a view, looking in the direction of a rail, of the whole device in elevation, showing also a part of the guard usually found in a street-car and employed in my instrument for the support of the whole device. Fig. 2 is a view, taken at right angles to that which is shown in Fig. 1, of a vertical section of the complete device, together with a section of a part of the guard. Some of the parts are not shown in section, and the brush in both instances is merely represented by some groups of three parallel lines to indicate in a typical way that it is any suitable kind of a brush. Fig. 3 is a section of that portion of the device in Fig. 2 taken at line X. It is merely intended to represent the shape of the cross-section. Fig. 4 shows a side view of the rail of a track to indicate about the proportional distance of the brush above the same when the brush is in its highest position.

A represents the guard usually found in street-cars. Connected to this by means of bolts B is an arm C, having a bearing D, in which is adapted to slide a tube E up and down in a vertical direction. The upper end of the tube E has a projecting rim F, and between the bearing D and this projecting rim F is a helical spring G. The said spring is coiled around the tube E, but is loose thereon, and normally acts to overcome the force of gravity or the weight of the tube E and the brush H. The spring, therefore, acts in such a way that with a slight force in either direction of the hand upon the brush the latter can be raised or lowered.

The tube E is provided with a series of holes I, and the bearing D is also provided with a hole for receiving a given split pin J, carried on a chain K, whose one end is attached to some part of the bearing D.

Having described the detailed construction of the device, its operation may now be studied.

In Fig. 2 the brush is shown in its highest position, where it would usually be when there is no trouble because of snow or dirt on the track, but as soon as it begins to snow the pin J should be removed and the tube E be pushed down until the pin can be inserted in one of the holes I. When the brush is new, it will touch the track with about the right pressure when the said pin is placed in the lowest hole I. One of the great troubles in connection with track-cleaners of this class is that the brush wears out or becomes shortened. I provide for overcoming this difficulty by my construction, for when the brush becomes shorter by wear it is only necessary to remove the pin J, to push the tube down farther, and to insert the pin through the hole in the bearing D and through one of the upper holes I, so that by this construction the wearing of the brush may be compensated for.

In the drawings, L represents the rail of the railway-track.

I claim as my invention—

1. The combination with the truck of a car rigidly held at a fixed position from the rail of a railway-track, of a bearing connected to the truck, a brush whose handle has holes and passes through said bearing, a spring normally retaining the brush at a distance above the track, and a pin passing through the bearing and through said holes, for holding the brush with a predetermined pressure against the rail.

2. The combination with the guard of a street-car, of an arm C, secured thereto and provided with a bearing D, located directly over the rail of the track, a tube E, having a rim F, at its upper end, and a brush at its lower end, and pasing through said bearing D, a helical spring G, surrounding the tube, having one end resting against the bearing, and the other end against the said rim, the tube being provided with a hole near its lower end, and a series of holes near its upper end, and a pin carried by the bearing and adapted to pass therethrough, and through one of said holes.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 4th day of January, 1896.

WILLIAM E. SHEPARD. [L. S.]

Witnesses:

M. H. DUMONT,

ARLEY I. MUNSON.