

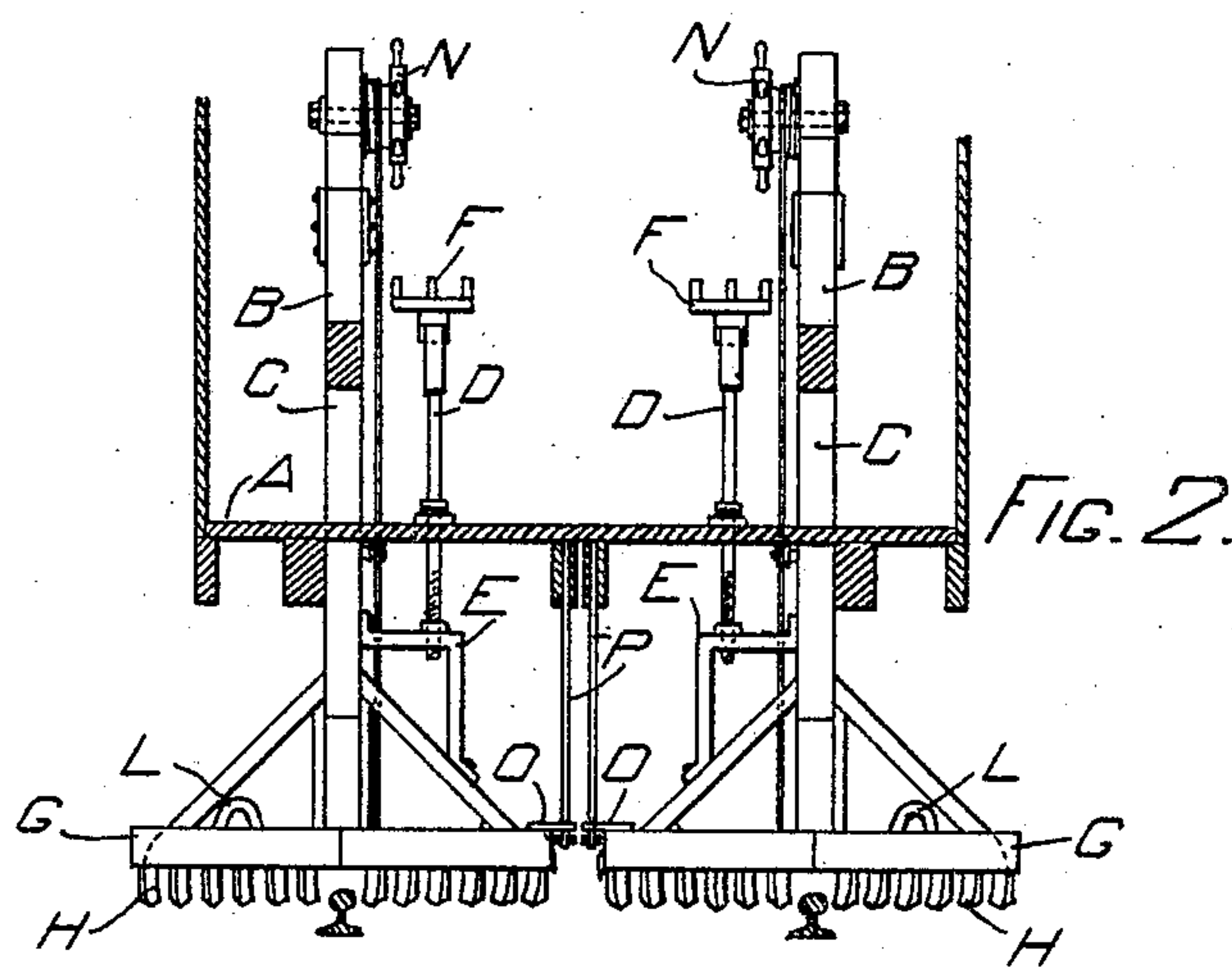
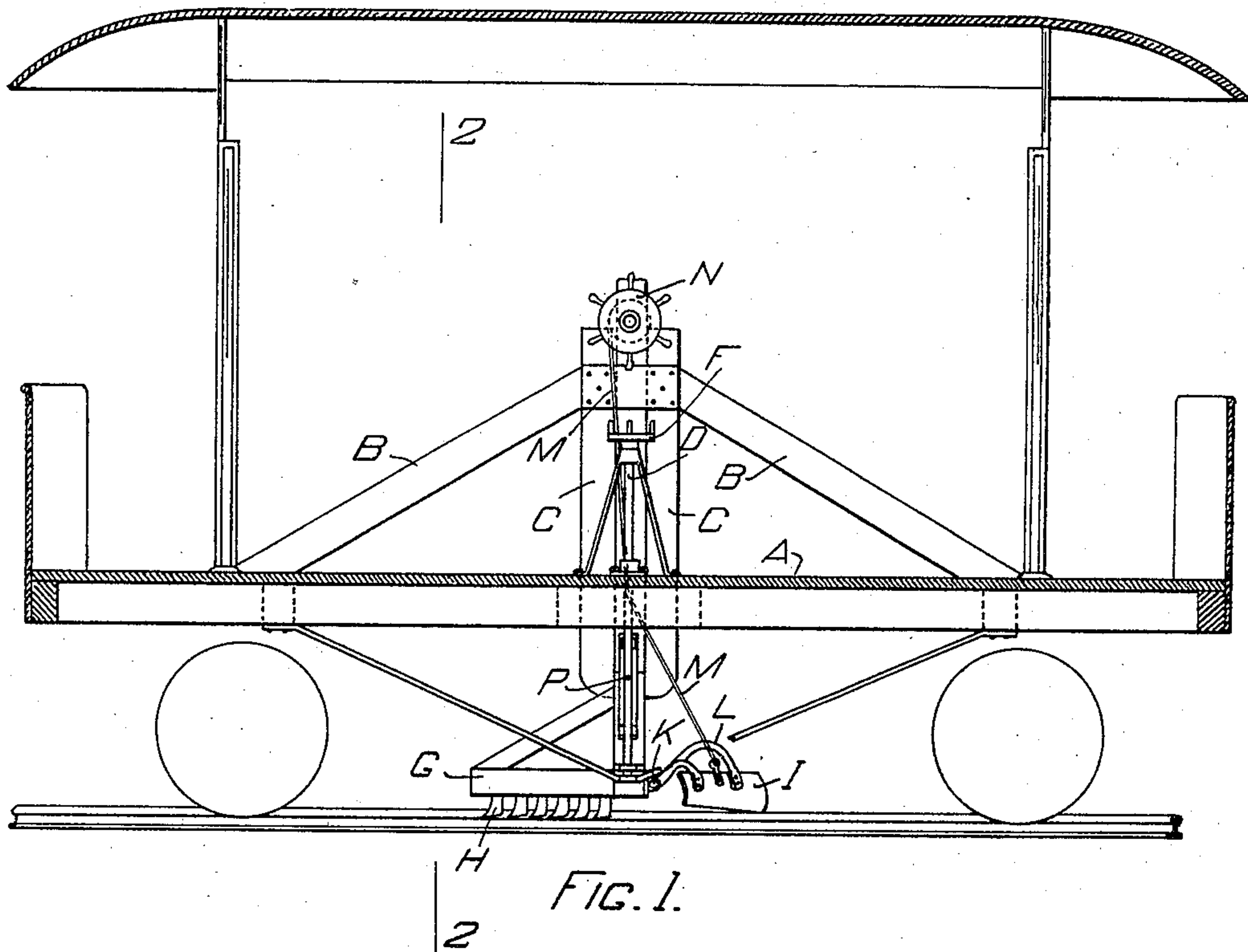
No. 773,652.

PATENTED NOV. 1, 1904.

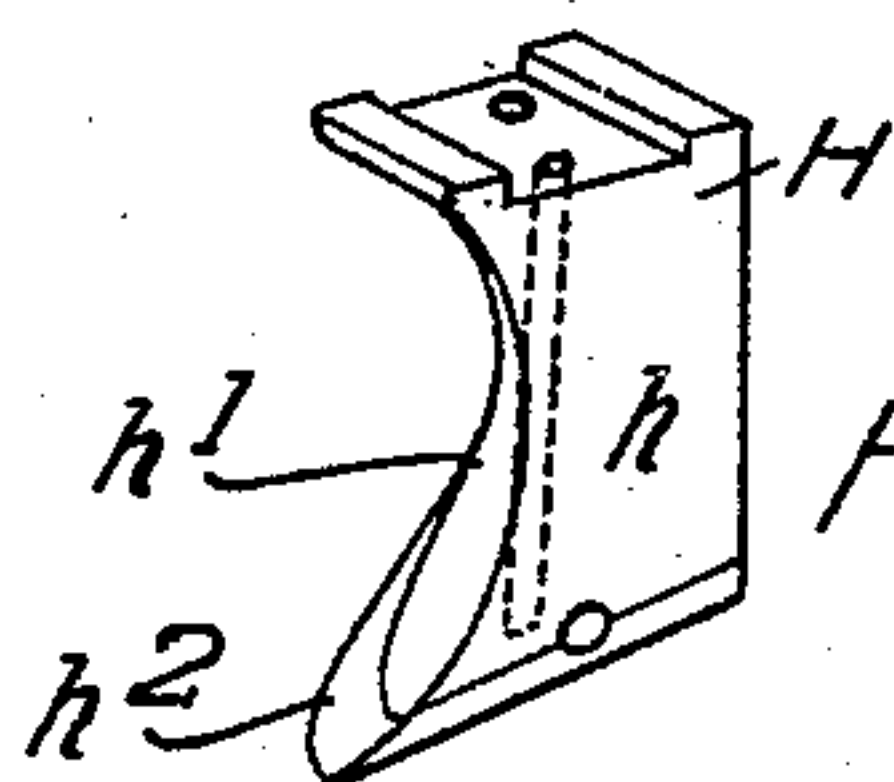
F. R. LARRABEE.
TRACK CLEANER.

APPLICATION FILED APR. 18, 1904.

NO MODEL.



WITNESSES
Wm. B. Poor.
J. N. Houston



INVENTOR
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BY
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UNITED STATES PATENT OFFICE.

FRANK R. LARRABEE, OF SOUTH PORTLAND, MAINE.

TRACK-CLEANER.

SPECIFICATION forming part of Letters Patent No. 773,652, dated November 1, 1904.

Application filed April 18, 1904. Serial No. 203,602. (No model.)

To all whom it may concern:

Be it known that I, FRANK R. LARRABEE, a citizen of the United States, residing at South Portland, Maine, have invented certain new and useful Improvements in Track-Cleaners, of which the following is a specification.

This invention relates to track-cleaners, and particularly to that class of cleaners which are to be used in removing caked snow or ice.

It has been difficult heretofore by any of the cleaners in use to remove from the track ice or snow after it has been packed and frozen.

It is the object of the present invention to provide means for cutting up ice or snow in this condition, so that it may be readily removed from the track, and this is accomplished by a certain arrangement of cutters and other parts, which will be more fully described hereinafter.

In the drawings, in which like letters of reference indicate corresponding parts throughout, Figure 1 is a side view of a car equipped with the track-cleaner. Fig. 2 is a section on the line 2 2, Fig. 1; and Fig. 3 is a detail of a cutter-tooth.

A is a car of ordinary construction carrying frames B, in which move slides C. The slides C are raised and lowered by the screws D, which engage a threaded bracket E on said slide and are rotated by the heads F to raise and lower the same.

G is a cutter-frame mounted on the slide C and bearing the teeth H. The teeth H are formed with a flat surface h and a curved surface h' , intersecting to form a cutting edge i . h^2 is a removable wear-plate. These teeth are arranged along the cutter-carrier G in a V-shaped line successively following each other and having their plane faces h faced away from the rail and parallel to each other.

I is a scraper which is mounted on an arm L, hinged at K to the slide C. This scraper is raised and lowered through a rope M and a windlass N.

The cutter-frames G are guided on their inner ends by plates O, which slide on the rods P, thus holding the cutters and preserving their proper relation to the rail. With the

cutters arranged in this manner and with their particular form of teeth snow or ice is chipped off by the successive action of these teeth and thrown aside to clear the cut for the next tooth. Thus the first cutter will plow a furrow alongside the rail and slightly below its surface. The next succeeding tooth will chip off a strip of ice or snow corresponding to the distance between the first and second tooth and will in turn clear its cut for the third tooth, and so on. In this way the chipping action is secured, which greatly reduces the strain upon the cutter structure.

In operating the cleaner the cutters are raised or lowered to secure the proper relative adjustment to the track and the car is started. The scraper I is controlled by the windlass N to regulate its bearing upon the track to throw out the ice or snow which has been cut from the track.

The cutters may be raised or lowered in various ways and the scraper controlled by different means from that shown.

What I claim, and desire to secure by Letters Patent, is—

1. In a track-cleaner, a sliding frame, means to raise and lower said frame, a V-shaped cutter-carrier, a series of successively-acting cutter-teeth mounted on the sides of said frame, said teeth having a plane surface and a curved surface intersecting therewith to form a cutting edge, the plane faces of the cutters on both sides of the frame being faced outward or away from the rail, and a scraper for removing the cut snow or ice from the track.

2. In a track-cleaner, the combination of two or more successively-acting cutter-teeth having plane surfaces which are parallel, and curved surfaces intersecting said plane surfaces to form cutting edges.

3. In a track-cleaner, a sliding frame, means to raise and lower said frame, a V-shaped cutter-carrier, a gang of successively-acting cutter-teeth mounted on the sides of said frame, said teeth having a plane surface and a curved surface intersecting therewith to form a cutting edge, the plane faces of the cutters on both sides of the frame being faced outward or away from the rail.

4. In a track-cleaner, a pair of diverging gangs of successively-acting cutter-teeth, said teeth being set to cut parallel.

5. In a track-cleaner, a pair of diverging gangs of successively-acting cutter-teeth, the leading tooth of each gang being set to cut by the rail.

6. In a track-cleaner, a sliding frame, means to raise and lower said frame, a V-shaped cutter-carrier, a gang of successively-acting cutter-teeth mounted on the sides of said frame, the leading tooth of each gang being set to

cut one on each side of the rail, said teeth having a plane surface and a curved surface intersecting therewith to form a cutting edge, the plane faces of the cutters on both sides of the frame being faced outward or away from the rail. 15

In testimony whereof I affix my signature in presence of two witnesses.

FRANK R. LARRABEE.

Witnesses:

EDWARD C. REYNOLDS,

CHARLES DUNN, Jr.