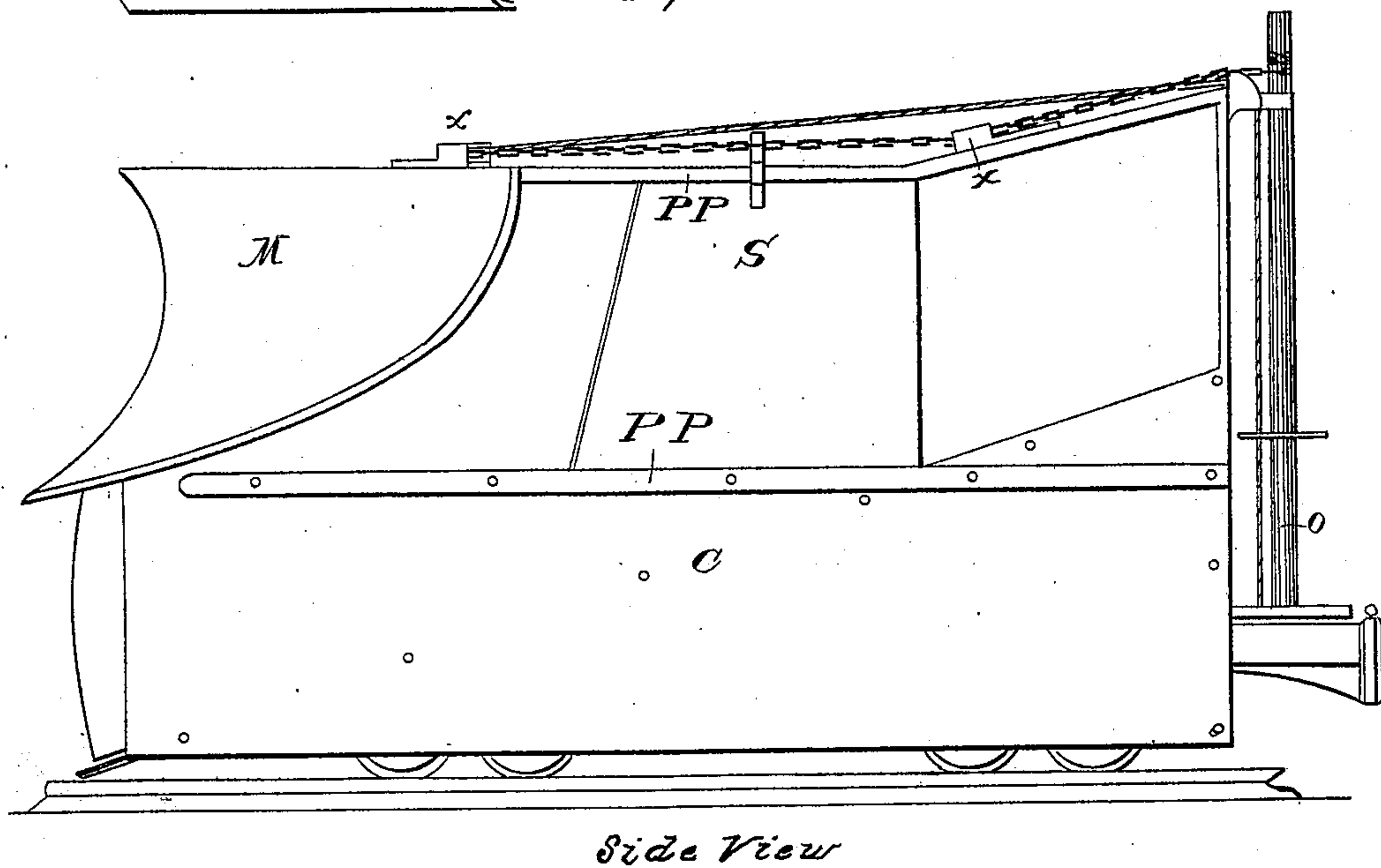
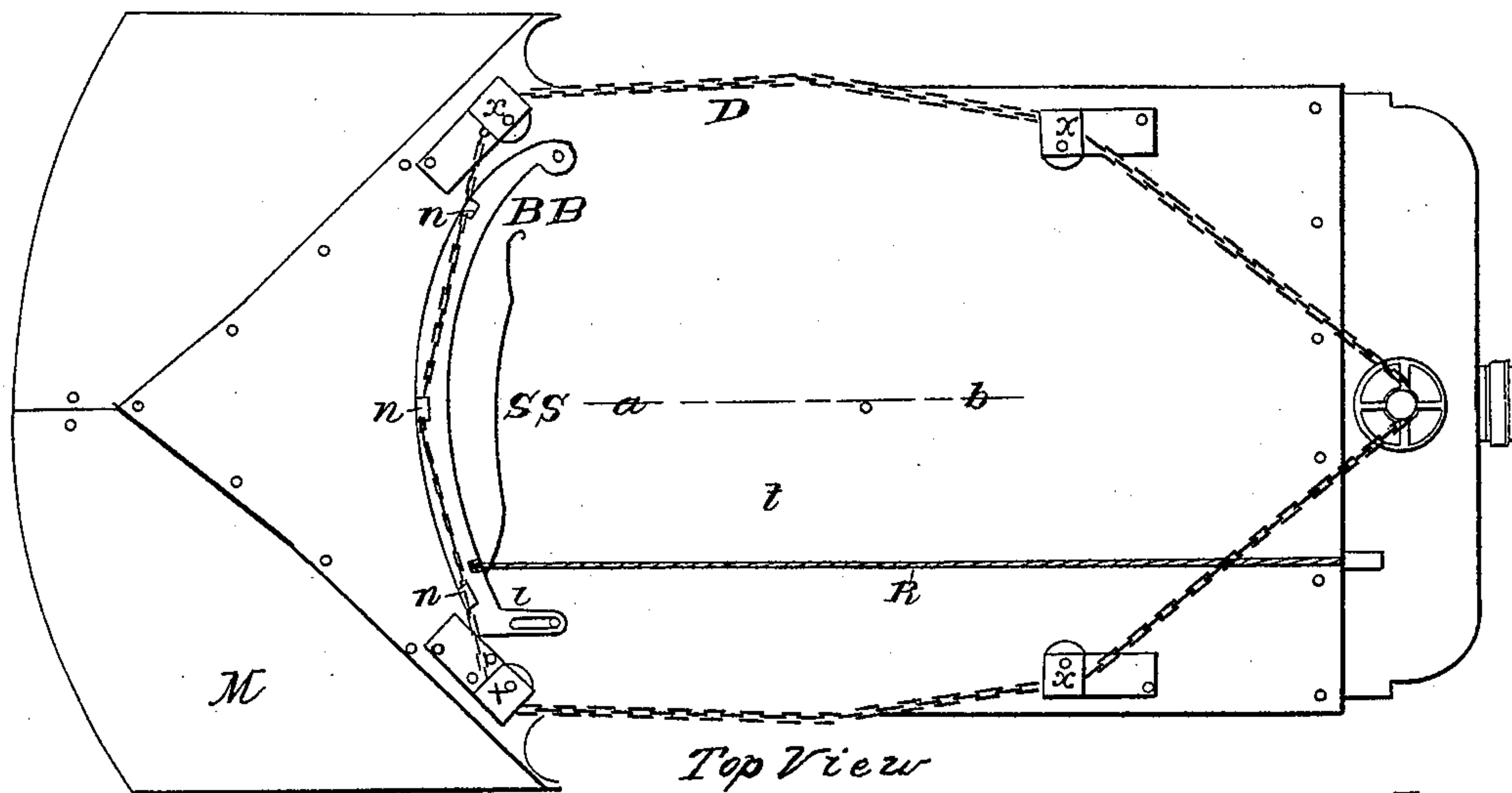


B. A. JOHNSON.
Car-Track Clearer.

No. 37,420.

Patented Jan. 13, 1863.



Witnesses

George Turner
Allan Throp

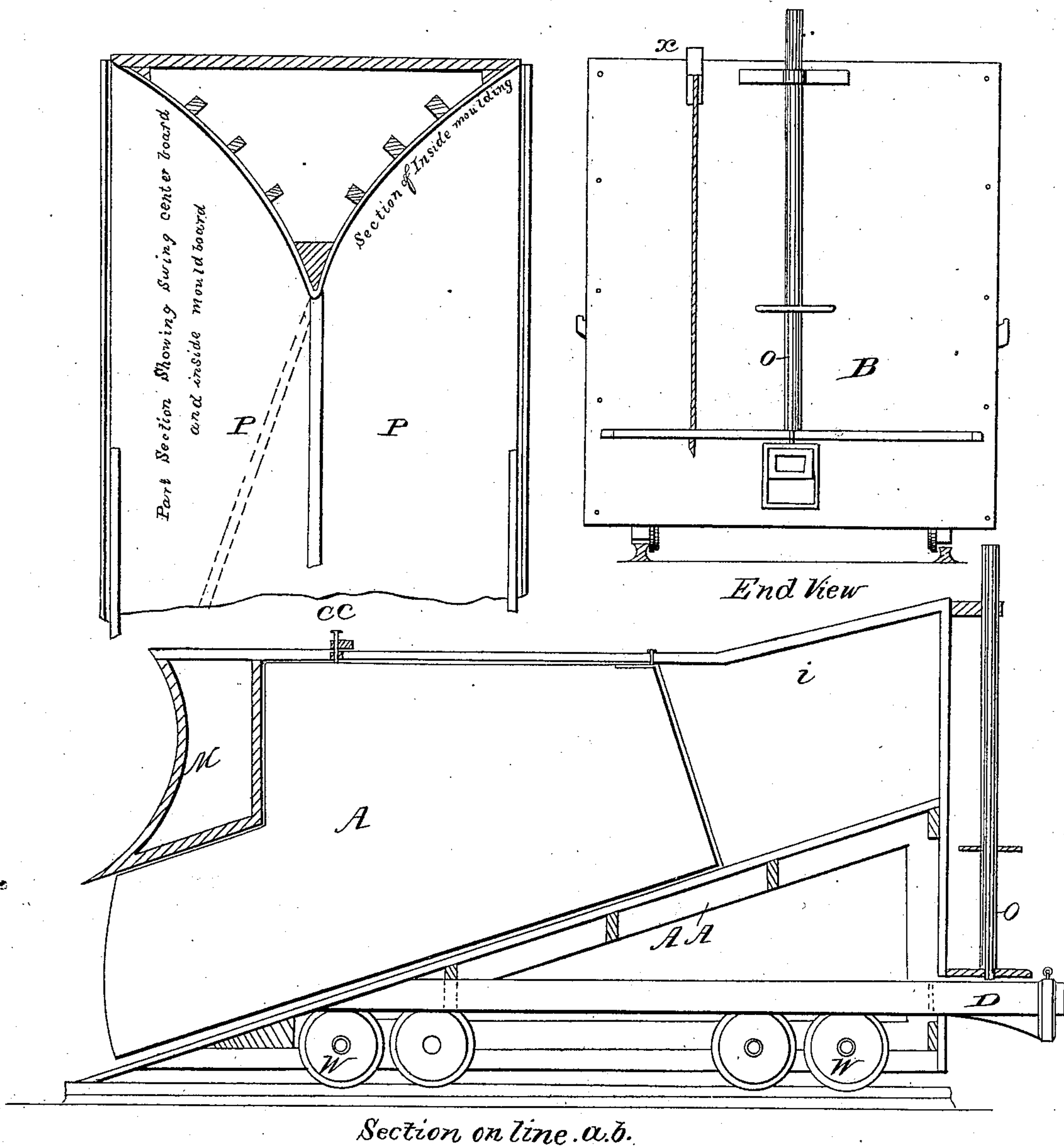
Inventor

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Witnesses

George Turner
Arthur Thorp

Inventor

B. A. Johnson

UNITED STATES PATENT OFFICE.

BENJAMIN A. JOHNSON, OF NORTH AUBURN, MAINE, ASSIGNOR TO HIMSELF AND EARL BLOSSOM.

IMPROVEMENT IN RAILROAD SNOW-PLOWS.

Specification forming part of Letters Patent No. 37,420, dated January 13, 1863.

To all whom it may concern:

Be it known that I, BENJAMIN A. JOHNSON, of North Auburn, in the county of Androscoggin and State of Maine, have invented a new and Improved Railroad-Plow for Clearing Accumulated Snows from Rail-Tracks; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The prodigious mass or bodies of snows that accumulate upon railroads in our northern winters, and thereby often causing great delay to rail-car travel, render some thorough and efficient method of removing the same, and without obstructing car-travel, very desirable. For this purpose I have invented the following simple and mechanical means, to wit: an inclined plane for a base, with side walls, which, together with a top covering, form an opening or space through which the snow passes. In the middle of this opening is an upright swing center board or cutter, to divide the mass of snow as it rises upon the inclined plane, which, as it reaches the height of the plane, is thrown off to the right and left with amazing power and rapidity. If, as is often the case at side stations and depots, it becomes necessary to throw the snow on one or the other side of the rail-track, the upright swing center-board or cutter is so arranged that it can be easily moved to the right and left side of the opening, and at the same time carry with it a slide in the upper portion of the opposite wall by simply turning a horizontal wheel attached to a perpendicular shaft or brake affixed to the rear end of the plow. To this shaft is attached a chain, which, by means of guide-pulleys arranged on the top of the plow, moves the swing center-board, together with the side slides in the upper portion of the walls; also, upon the top of the plow lies a swing-bar having three notches and a slot and confined by a spring and bolts. In the center notch of this bar is a pin or bolt, which extends into the upper edge of the center-board and holds the same in its position. The side notches are distances to which the center-board can move. When it becomes necessary to move the center-board and slides,

the operator pulls a rope attached to and near the end of the swing-bar, which moves to the extent of the slot and liberates the parts to be moved. Should the depth of snow exceed the height or space at the mouth of the plow, the double mold-boards immediately over and above the mouth shells off the excess, and the fixed center of the mold-boards divides the snow and it is thrown off to the right and left with great ease.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, W represents wheels upon which the plow is rolled. D shows the draw-bar. A A, the frame. A shows the swing center-board, and *i* the inside mold-boards. M is the front mold-boards. The base or inclined plane is shown by the letter P. B shows the back or rear end of the plow. S shows the slides. *t* shows top of plow; R, the rope that moves the swing-bar B B. S S show the spring that holds the swing-bar B B in place. B B show the swing-bar. L is the chain that moves the center-board A and slides S. X shows the pulley. V represents the slot in the swing-bar B B. C shows the side walls. Little *n* shows wheel on shaft at the rear end of plow, and *o* the shaft to which the chain L is attached; P P, the grooves for slides S. *a b* represent the center line. *n n* show notches in swing-bar B B, as distances for center-board and slides to move; C C, the bolt that holds the center-board in place.

Some of the advantages in my invention over the plows in common use are, first, it acts upon the powerful principle of levers—viz., the wedge; second, being an inclined plane, it requires less power to drive it through snow-drifts; third, operating like a wedge, it raises the snow much easier than the double mold-boards alone; fourth, it will not only move the snow to both sides of the track, but it will on double tracks, side stations, depots, or elsewhere, turn of the snow to either side desired.

I do not claim the wheels W, draw-bar D, pulleys X, chain L, rope B, spring S S, brake or upright shaft O, mold-boards M and *i*, frame-work A A, inclined P, nor swing center-board A; but

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

The side walls, C, side slides, S, swing-bar B B, grooves P P, top covering, *t*, and the opening or space through which the snow passes, combined and operating in connection with wheels W, draw-bar D, frame-work A A, pulleys X, chain L, rope R, spring S S, brake or

upright shaft O, mold-boards M and *i*, inclined plane P, and swing center-board A, substantially as set forth, and for the purpose specified.

B. A. JOHNSON.

Witnesses:

S. THORP,
GEORGE TURNER.