M. C. Bogia,

Track Clearer.

No. 37,897. Patented. Mar. 17. 1863.

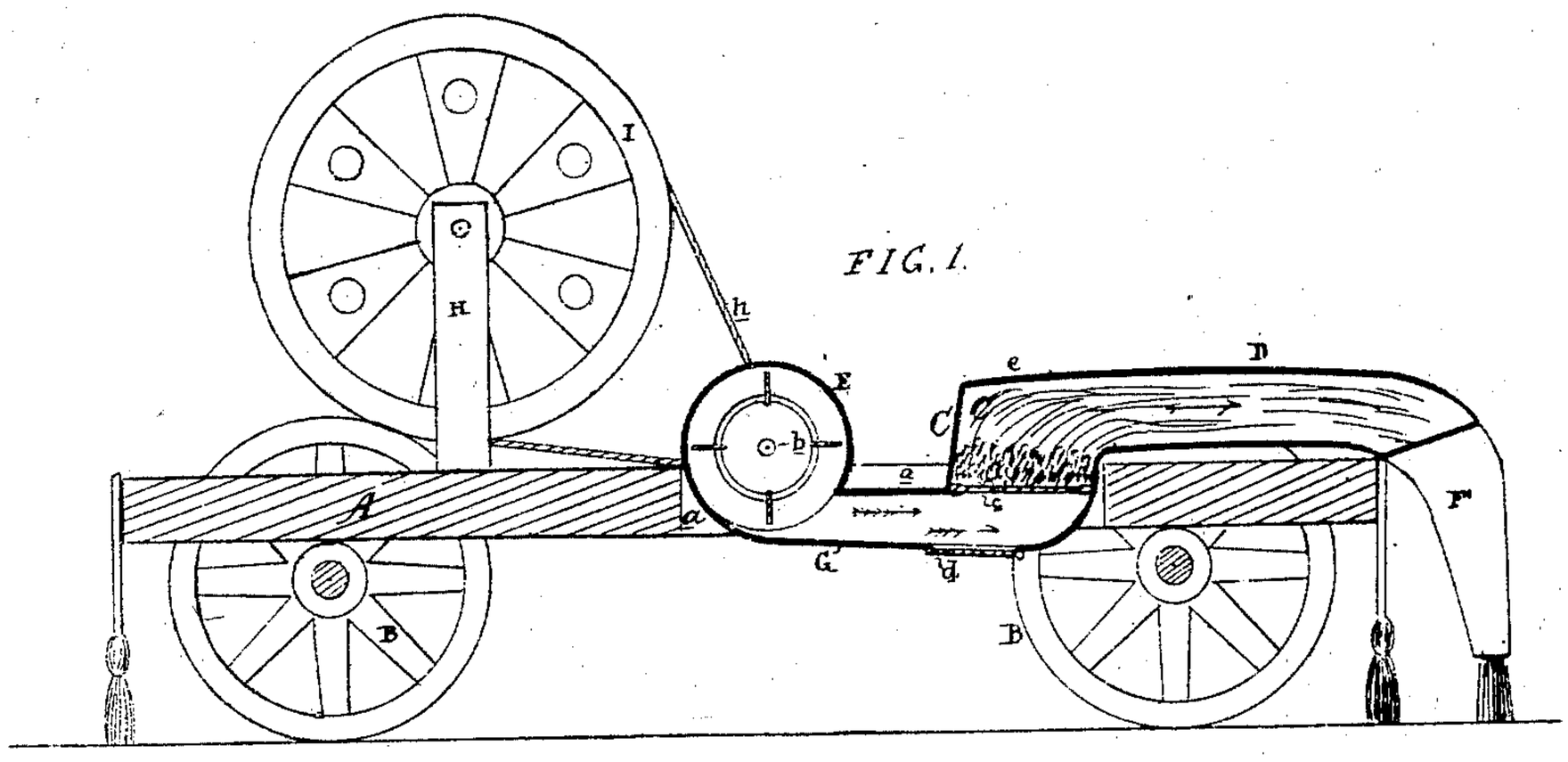

FIG. 1.

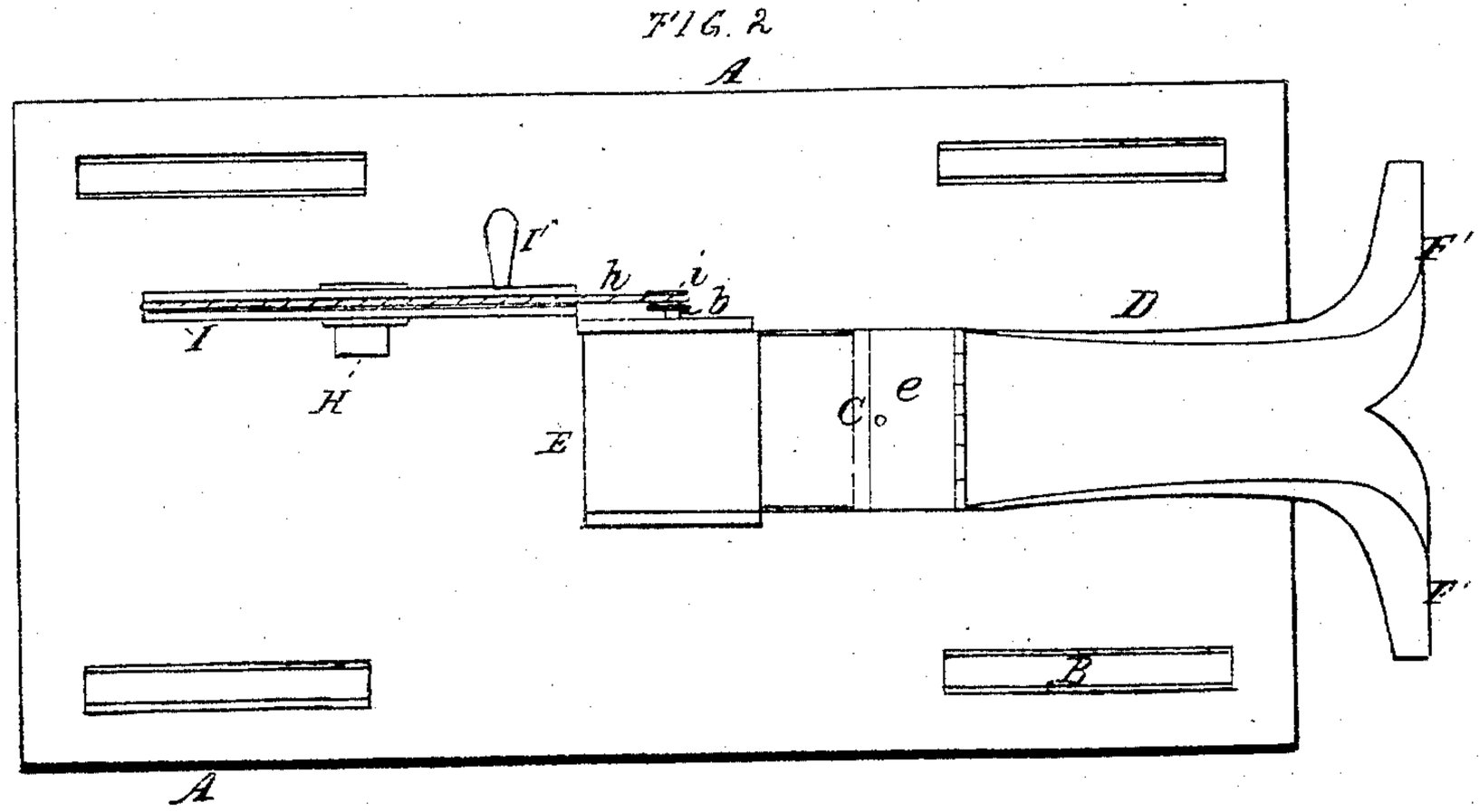

FIG. 2

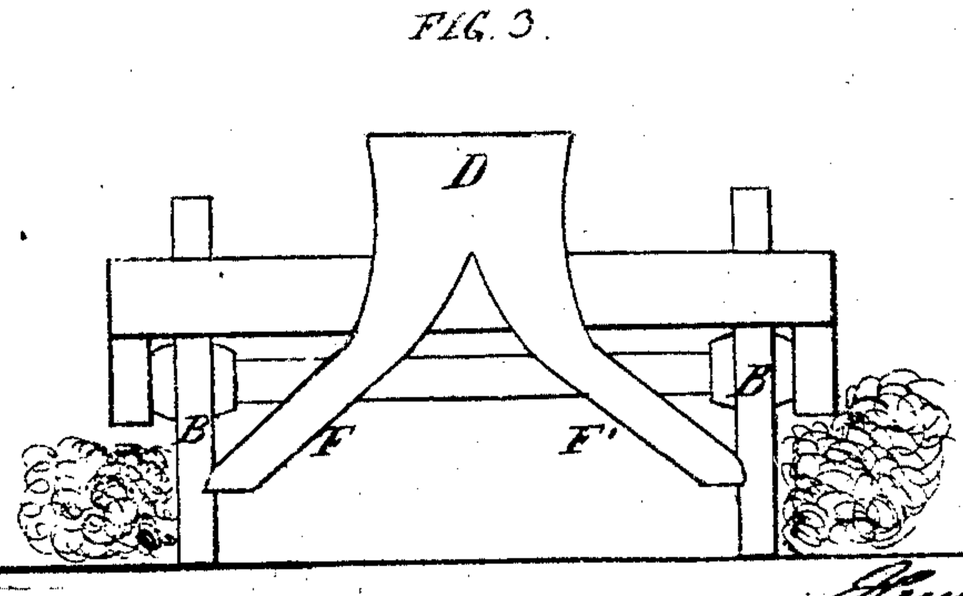

FIG. 3.

WITNESSES { Charles E. Foster
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Thos. Howson.
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UNITED STATES PATENT OFFICE.

MATTHEW C. BOGIA, OF PHILADELPHIA, PENNSYLVANIA.

MACHINE FOR REMOVING SNOW AND ICE FROM RAILROADS.

Specification forming part of Letters Patent No. 37,897, dated March 19, 1863; Reissued December 23, 1873, No. 5,697.

To all whom it may concern:

Be it known that I, M. C. BOGIA, of Philadelphia, Pennsylvania, have invented certain Apparatus for Removing Snow and Ice from Railway-Tracks; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention consists of a fire chamber, certain pipes, and a blower or its equivalent the whole being so arranged on a suitable truck and so operating as to discharge onto the rails of a track a blast of such a heat that the snow or ice which may have accumulated on the rails will be rapidly melted.

In order to enable others to make and use my invention I will now proceed to describe its construction and operation.

On reference to the accompanying drawing which forms a part of this specification Figure 1 is a sectional elevation of my apparatus for removing snow and ice from railway tracks; Fig. 2 a plan view, and Fig. 3 a front view.

A is a truck supported on wheels B, B, which may be either plain or flanged and adapted to city railway tracks. A portion of the truck near the center is removed leaving the opening *a* in the forward end of which is situated the fire chamber C, communicating with a horizontal flue D, which projects over the front of the truck where it is bifurcated, and formed into two pipes or tubes, F and F′ which project downward and terminate at a point above or adjacent to the rails of the truck.

At the rear of the fire box C, is a blower E, in which revolves the spindle *b* a pipe G forming a communication between the blower and the space beneath the grate *c* of the fire chamber. The under side of the pipe G beneath the fire chamber has a hinged door *d*, and the top of the fire chamber is furnished with a similar hinged door or lid *e*.

At the rear of the blower E and on the truck is an upright H, on which turns the driving wheel I a belt or band from the latter passing around a pulley *i* on the spindle *b* of the blower and the wheel being furnished with a suitable handle I′.

The fuel having been introduced through the opening in the top of the fire chamber and properly ignited, the apparatus is ready for being drawn over the track from which the snow and ice has to be removed. As the truck traverses the railway the necessary rotary motion is imparted to the blower, so that the sparks, smoke, and other heated products of combustion will be forced through the flue D, and through the pipes F onto the rails of the track. Under the influence of this heat the snow or ice on and near the rails is quickly melted.

The lower ends of the pipes F may be so formed as to project forward and act as plows to partially remove deep snow from the track, the snow and ice remaining on the rails being melted by the hot blast.

The blower may be driven from the wheels of the truck by a suitable system of gearing or pulleys and bands; or a small engine may be erected on the truck for the purpose of driving the blower.

Brushes shown in red lines Fig. 1, may be used to sweep from the rails any partially melted snow or ice which may remain on the same.

I claim as my invention and desire to secure by Letters Patent—

The fire chamber C pipes F and F′ and blower E the whole being constructed, arranged on a truck and operating substantially as set forth.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

MATTHEW C. BOGIA.

Witnesses:
JOHN WHITE,
CHARLES E. FOSTER.

[FIRST PRINTED 1912.]