

J. CODY.

SNOW-MELTING MACHINE.

No. 171,602.

Patented Dec. 28, 1875.

Fig. 1

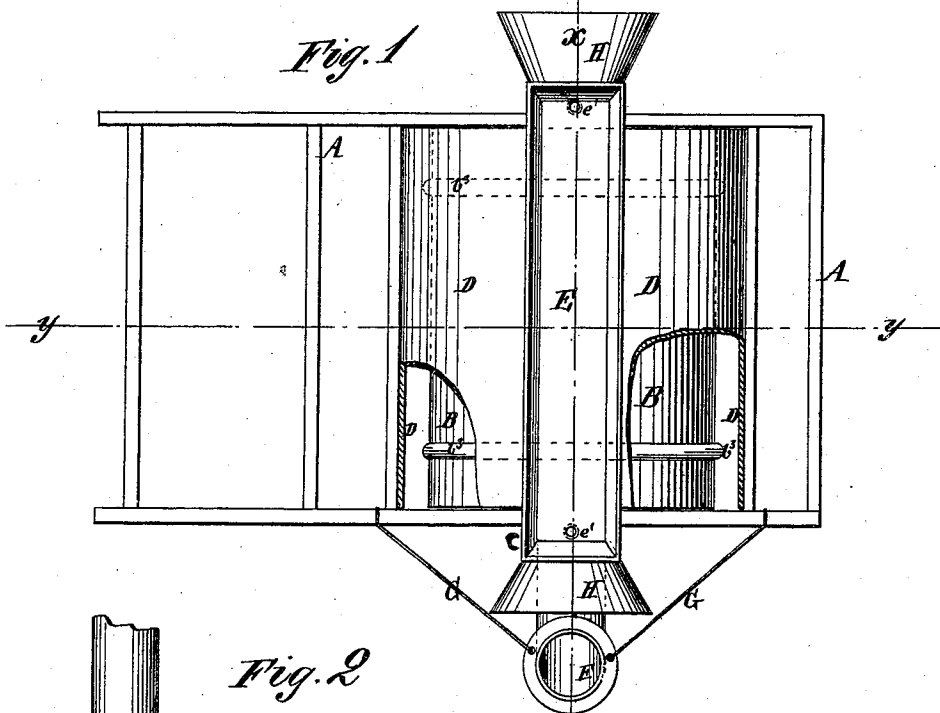


Fig. 2

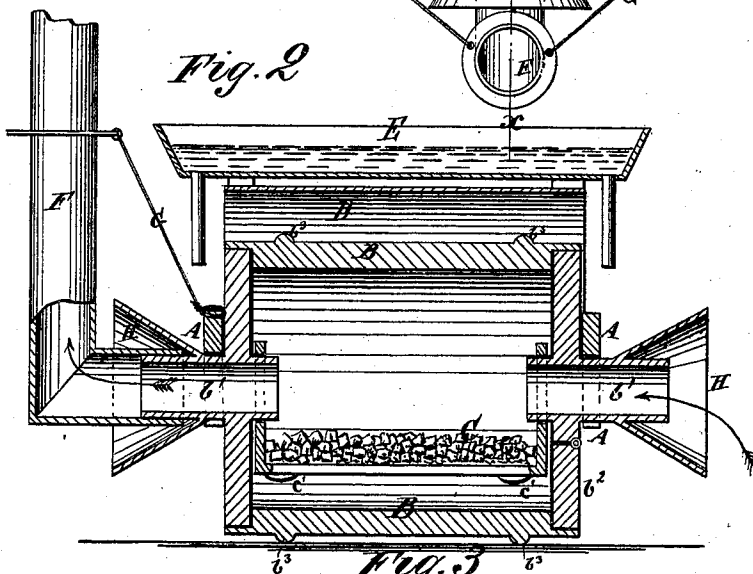
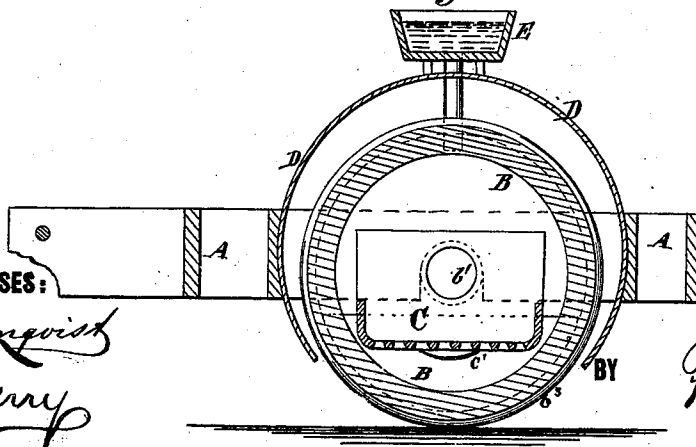


Fig. 3



WITNESSES:

A. W. Almqvist  
A. F. Perry

INVENTOR:

John Cody  
BY  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JOHN CODY, OF NEW YORK, N. Y.

## IMPROVEMENT IN SNOW-MELTING MACHINES.

Specification forming part of Letters Patent No. **171,602**, dated December 28, 1875; application filed June 5, 1875.

*To all whom it may concern:*

Be it known that I, JOHN CODY, of the city, county, and State of New York, have invented a new and useful Improvement in Snow-Melting Machines, of which the following is a specification:

Figure 1 is a top view of my improved machine, part being broken away to show the construction. Fig. 2 is a vertical cross-section of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a vertical section of the same, taken through the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved machine for melting the snow off streets and railroad-tracks, which shall be simple in construction, convenient in use, and effective in operation.

The invention will first be described in connection with drawing, and then pointed out in claims.

A is the frame of the machine. B is a large and heavy iron roller, the journals *b*<sup>1</sup> of which revolve in bearings in the frame A, are made hollow, and project a little into the cavity of the said roller B. C is a fire-grate, placed within the cavity of the roller B, and the ends of which project upward and have holes formed through them, to receive the inwardly-projecting ends of the hollow journals *b*<sup>1</sup> of the roller B, so that the said grate may be suspended from the said journals. The grate C is made heavy, or has a weight or weights, *c*<sup>1</sup>, attached to it, so as to keep the said grate horizontal as the roller rolls forward. One of the heads of the roller B is made in two unequal parts, the straight edge of the smaller part *b*<sup>2</sup> being hinged to the straight edge of the larger part, to form a door to give access to the interior of the roller. The door *b*<sup>2</sup> is secured, when closed, by a pin, bolt, or other fastening. When the roller B is stopped with the door *b*<sup>2</sup> upward it gives access to the space above the grate C for convenience in putting in fuel. When the roller is stopped with the door *b*<sup>2</sup> downward it gives access to the space below the grate, for convenience in removing ashes, cinders, &c. The roller B is covered with a

semi-cylindrical cap or hood, D, to prevent the radiation of heat from said roller, and which is attached to the frame A. To the top of the hood D is attached a trough, E, to receive snow, which, as it melts, runs out through the drip-pipes *e*<sup>1</sup> and flows upon the journals *b*<sup>1</sup>, to keep them from becoming unduly heated. To the journals *b*<sup>1</sup> are attached flaring or conical caps H, to prevent the water from the trough E from entering the open ends of the said journals *b*<sup>1</sup> and checking the fire. One of the journals *b*<sup>1</sup> is designed to serve as a draft-opening for the entrance of air to support combustion, and the other is designed to serve as a flue for the escape of the smoke. The outer end of the journal *b*<sup>1</sup>, through which the smoke escapes, revolves in the lower end of the pipe or flue F, which is made with an elbow, which projects upward and is secured in an upright position by wires or chains G attached to it, and the lower ends of which are attached to the frame A.

If desired, a fan-blower may be attached to the frame A and geared with the roller B, to force a blast of air through the draft-opening of the journal *b*<sup>1</sup> to increase the combustion. The fan-blower is not shown in the drawings.

A scraper may be attached to the forward part of the frame A to level off the snow should it be drifted, to enable the roller B to operate upon it more effectively.

A rake or harrow may be attached to the rear end of the frame A, to roughen up any ice or snow that may be left unmelted by the roller, so that it may be melted off by the water from the melted snow as it flows into the gutters.

Around the roller B, near its ends, are formed, or around it are passed, ribs or bands or tires *b*<sup>3</sup>, which are designed to raise the face of the roller a little from the ground to give the melted snow a chance to flow off.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of roller B, having fire-grate suspended therein, with open-ended journals *b*<sup>1</sup> *b*<sup>1</sup> and smoke-stack F, as and for the purpose specified.

2. The vessel E, combined with roller B, and with end pipes opening downwardly and directly over the journals  $b^1$   $b^1$ , as and for the purpose described.

3. The combination, with roller B, of open-end journals  $b^1$ , provided with flaring caps H, as and for the purpose set forth.

4. A hollow snow-melting roll, B, having ribs  $b^3$   $b^3$  on the outside thereof, as and for the purpose specified.

JOHN CODY.

Witnesses:

JAMES T. GRAHAM,  
T. B. MOSHER.