(No Model.)

P. BRUNET.

SNOW PLOW.

No. 291,675. Patented Jan. 8, 1884.

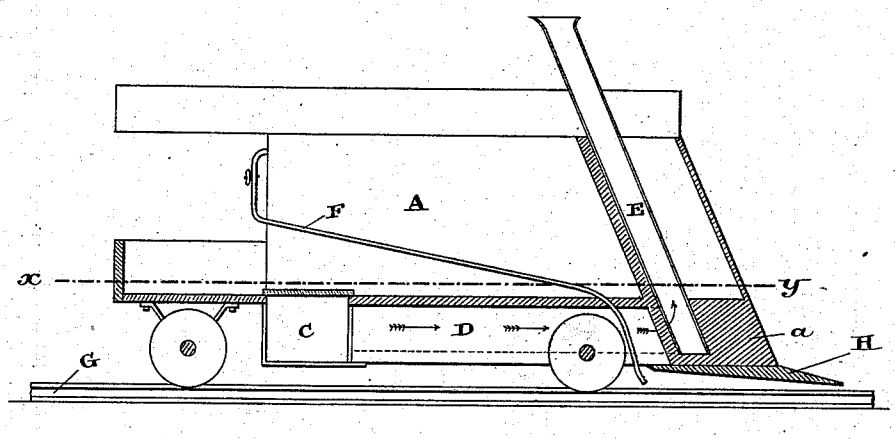


Fig. 1.

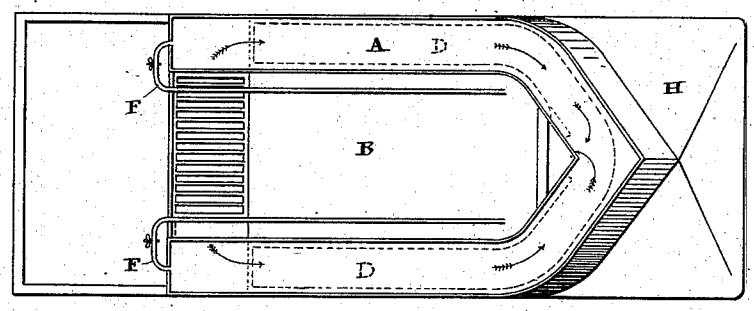


Fig. 2.

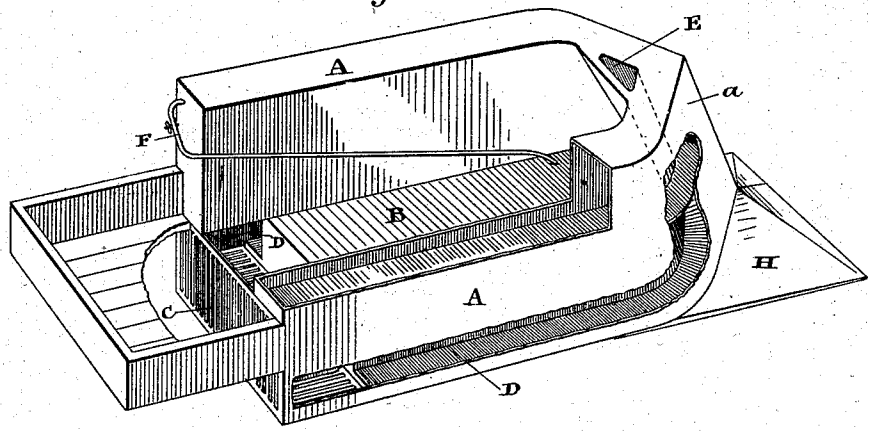


Fig. 3.

Witnesses.

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UNITED STATES PATENT OFFICE.

PIERRE BRUNET, OF TORONTO, ONTARIO, CANADA.

SNOW-PLOW.

SPECIFICATION forming part of Letters Patent No. 291,675, dated January 8, 1884.

Application filed June 14, 1883. (No model.) Patented in Canada August 20, 1883, No. 17,529.

To all whom it may concern:

Be it known that I, PIERRE BRUNET, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, barber, have invented a certain new and useful Snow-Plow; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of the invention is to devise an effective railway snow-plow; and it consists in the peculiar construction, arrangement, and combination of parts, as hereinafter more fully described and claimed.

Figure 1 is a sectional elevation of my improved snow-plow. Fig. 2 is a sectional plan through *xy*. Fig. 3 is a perspective view with a portion of the plow broken away to show the flues.

The principal objection to the railway snow-plow now in use is that in pushing off the snow it packs it into a solid mass, thereby forming a wall, which constitutes a resistance which the greatest power possible to be placed behind the plow is incapable of overcoming.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is a hollow chamber, shaped very much like the water-tank on the tender of a locomotive, but having a pointed front, *a*, similar to the front of an ordinary snow-plow. The hollow space B between the bifurcated tank A is intended to be occupied either by the men in charge of the plow, or, if it is found necessary to weight the plow, this space may be filled with iron or other metal.

C is a furnace placed below the floor of the space B, and situated between the bifurcated tank A, which tank extends from the bottom of the plow up to its top, and is intended to be filled with water.

D are flues leading from the furnace C through each division of the bifurcated tank A at or near its bottom, and extending from the furnace C to the vertical flue E, which flue passes up through the front *a* of the bifurcated tank A. I have stated that the tank A extends from the bottom of the plow to its top. In such a case the water within it would of course surround the flues D. In Fig. 3, however, I show the flues D at the bottom of the tank A, the top of the flues forming the bottom of that portion of the tank containing the water. In such an arrangement the heat of the flues D acts directly on the bottom portion of the sides of the tank A, while the water in the upper portion of the tank is heated sufficiently by the flues to impart the necessary warmth to the sides of the upper portion of the tank A. In such an arrangement the lower part of the tank would be warmer than its upper portion, which may be found advisable, as the snow immediately around it will be probably harder to remove than its light upper surface.

F are steam-pipes extending one from each side of the bifurcated tank A down through the plow to a point immediately above the rail G. These pipes should be provided with suitable cocks, and are intended to direct the steam from the tank A onto the rail for the purpose of blowing off the snow and rendering each rail as smooth and clean as it is in summer time.

In order to shovel up the snow toward the pointed front of my plow, I provide a flat shovel, H, formed on the bottom of the front of the plow. This shovel will raise the major portion of the snow clear of the track, leaving but little for the steam escaping from the pipe F to act on.

I do not mention of what material my plow should be made, as it is self-evident that the tank should of course be made of metal; nor do I give any dimensions or specify in detail the exact construction of my plow, as these are matters which will be regulated by the nature of the railway that the plow is to be applied to, and are questions of mechanical detail which it is not necessary for the inventor to specify, the foregoing description, with the drawings, being sufficient to enable any skilled mechanic to understand my invention, and to build a snow-plow according to its principles.

What I claim as my invention is—

1. A hollow bifurcated chamber or tank, A, shaped substantially as shown, and having flues D and E arranged within it, as described, in combination with the furnace C, substantially as and for the purpose specified.

2. In a snow-plow, and in combination with the furnace C and the bifurcated tank A thereof, having flues D and E arranged within it, as described, the pipes F, connected with and extending one from each side of the bifurcated tank through the plow to a point immediately above the rails, substantially as and for the purpose specified.

3. The combination of the bifurcated tank A, having pointed front *a*, flues D and E, furnace C, and shovel H, all constructed and arranged and operating substantially as and for the purpose specified.

4. In a snow-plow, the tank A, provided with a suitable furnace and flue, and having its sides constructed to act as a snow-plow, in combination with a pipe taking steam from the steam-space of said tank and directing it upon the rails, substantially as described.

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