

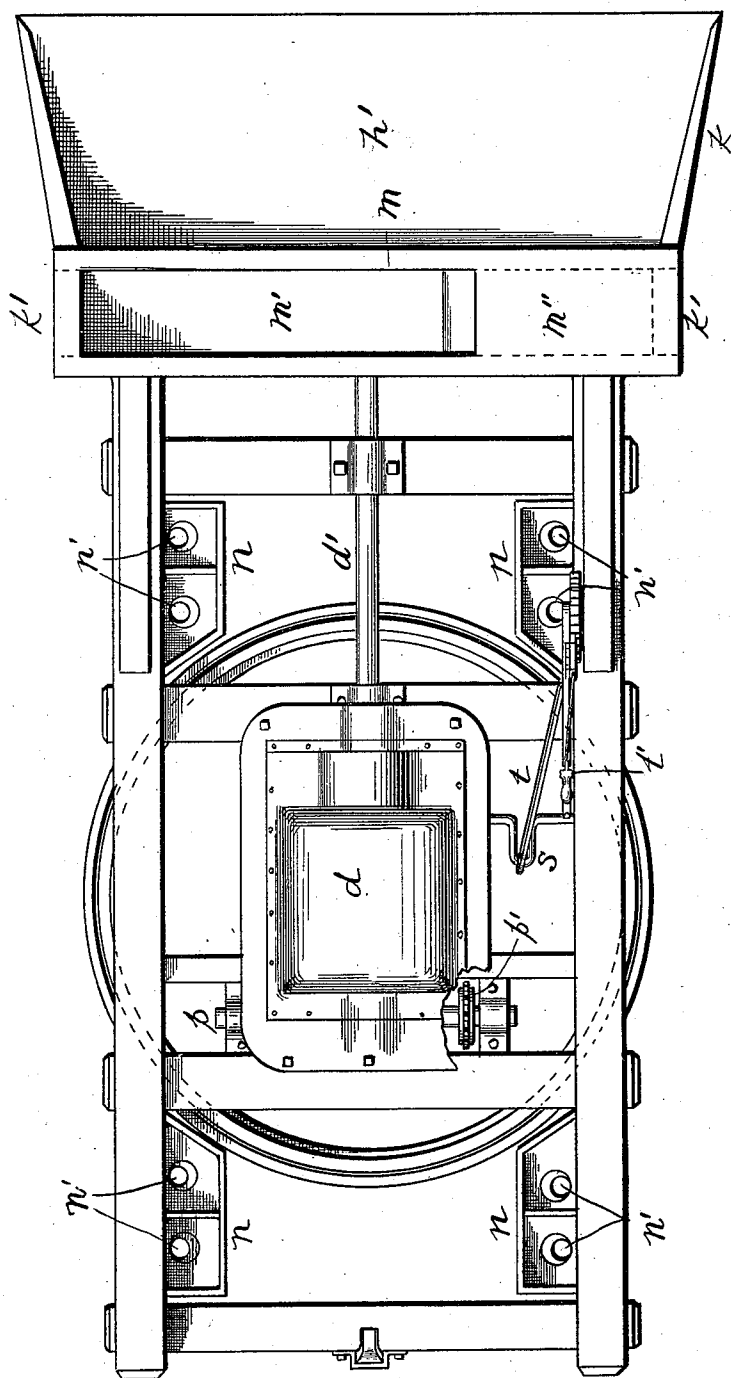
(No Model.)

3 Sheets—Sheet 1.

W. O. WOOD.  
ROTARY SNOW PLOW.

No. 530,739.

Patented Dec. 11, 1894.



WITNESSES:

*Chas Marvin.*  
*M. M. Borst*

INVENTOR

*William O. Wood.*

BY

*Smith & Denison*  
ATTORNEYS.

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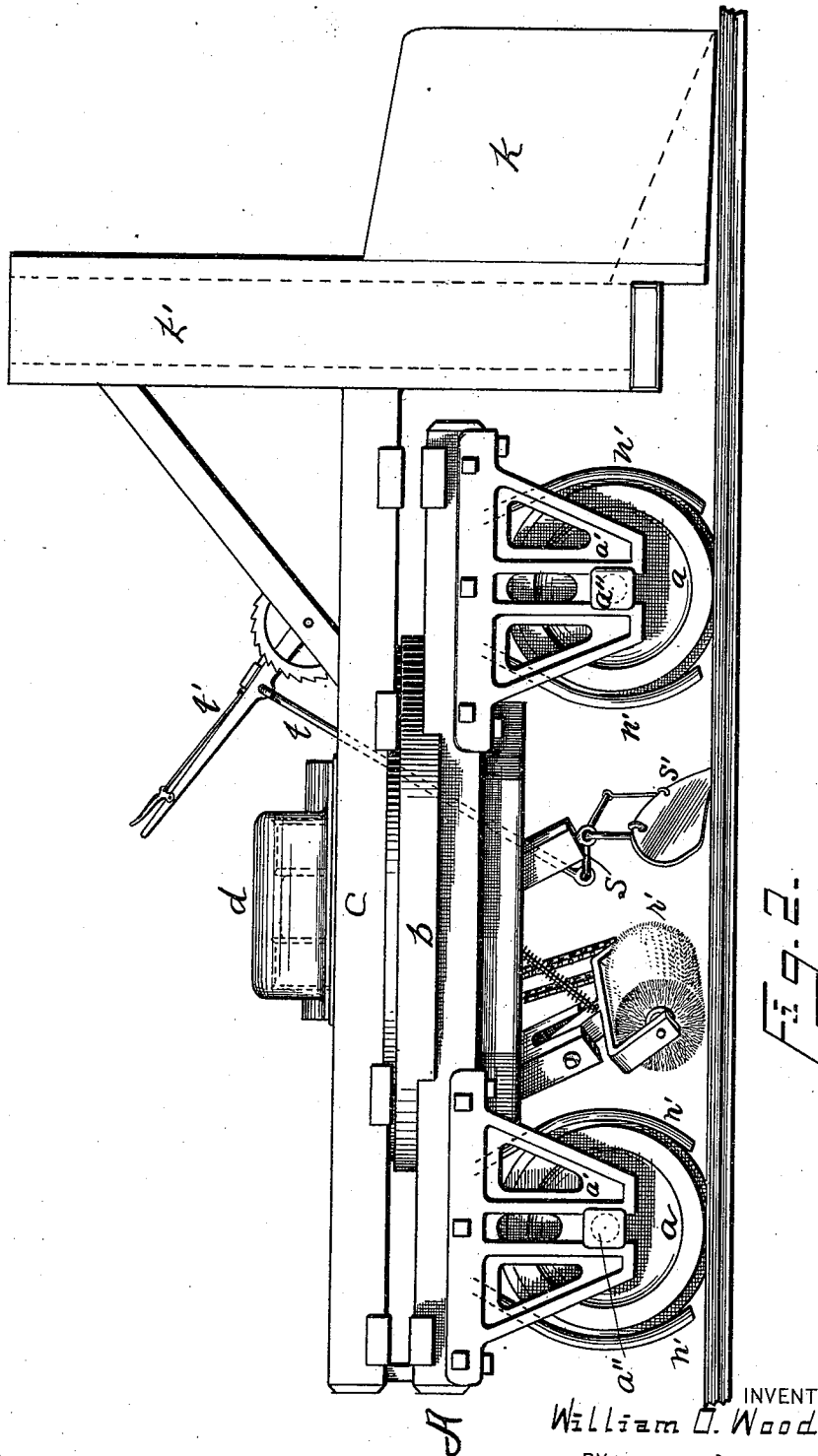


Fig. 2.

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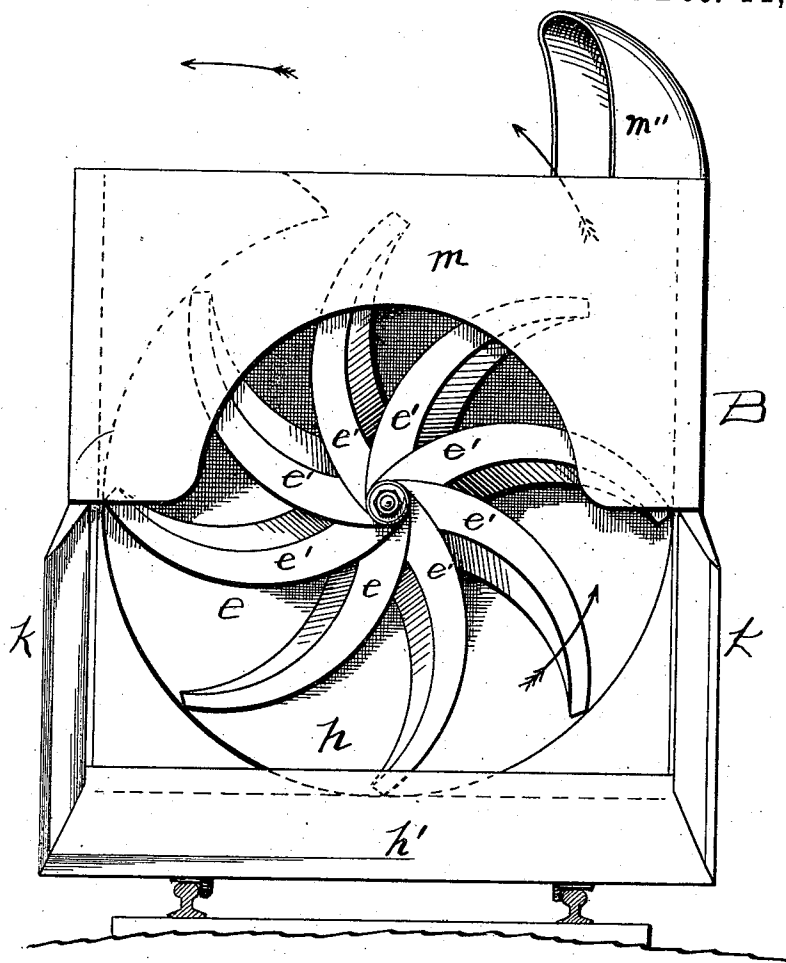


Fig. 3.

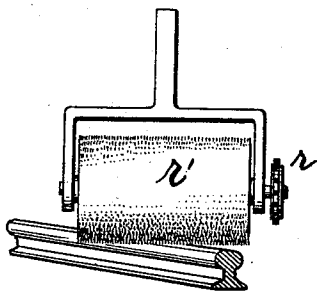


Fig. 4.

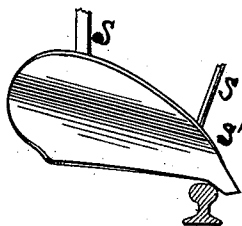


Fig. 5.

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M. M. Borch

INVENTOR  
William O. Wood  
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# UNITED STATES PATENT OFFICE.

WILLIAM O. WOOD, OF SYRACUSE, NEW YORK.

## ROTARY SNOW-PLOW.

SPECIFICATION forming part of Letters Patent No. 530,739, dated December 11, 1894.

Application filed December 13, 1893. Serial No. 493,520. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM O. WOOD, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and  
5 useful Improvements in Rotary Snow-Plows, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to rotary snow-plows  
10 for removing snow from railway tracks.

My object is to produce a rotary snow plow in which the main frame is mounted upon a suitable truck, and an auxiliary frame is mounted upon a turn table erected upon the  
15 main frame; in which the motor, and the rotating head are mounted upon the auxiliary frame, so by partially rotating this frame, the plow can be reversed to run in the opposite direction, without turning the truck around;  
20 in which the flanges, and sweepers, when used, are also carried by said rotatable auxiliary frame and are reversed simultaneously with the rotating head; in which said pipes are provided both in front and rear of the  
25 truck wheels, leading from a sand-box or boxes down to points contiguous to the rails; in which the rotating head is mounted in the rear part of a scraper and discharges the snow outward to either side of the track, through  
30 a suitable nozzle; in which the rotating head, consists of a suitable hub, to receive the driving shaft, and curved wings secured thereon, or said wings may be secured directly to or upon said shaft, and driven to operate cen-  
35 trifugally; and in which the discharge nozzle is mounted.

My invention consists in the several novel features of construction and operation hereinafter described and which are specifically  
40 set forth in the claim hereunto annexed. It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1, is a top plan of the snow-plow. Fig. 2, is a side elevation. Fig. 3, is a front  
45 elevation. Fig. 4, is a front elevation of the sweeper, detached. Fig. 5, is a like view of the flanger.

A— is the main frame, mounted upon the wheels —a— by suitable hangers —a'— and  
50 journal boxes —a''—. Upon this frame a

circular turn-table —b— is mounted, and upon this the auxiliary frame —c— is rotatably mounted, any ordinary means or devices being used to anti-frictionally support this frame rotatably upon said turn table. Upon  
55 this frame —c— the electric or other motor —d— is mounted, and adapted to drive the shaft —d'— upon which the head —e— is secured. This head consists of a hub (not shown) upon which the curved wings —e'—  
60 are secured, or said wings may be secured upon the shaft, by any ordinary means. This head is within the case —B— consisting of the back —h—, scraper —h'—, converging sides —k— projecting from the vertical sides  
65 —k'—, and front —m—, part of the top being open as at —m'—, and —m''— is the discharge spout erected upon the case, and curved substantially as shown. The wings  
70 substantially fill the space between the front and back, and when the head is driven to rotate rapidly, the wings pick up the snow from the bottom of the case in rear of the scraper, and centrifugally throw it out through the  
75 discharge pipe, substantially as indicated by the arrows in Fig. 3. Sand boxes —n— are also mounted upon the main frame, and pipes —n'— lead from them down on each side of  
80 each wheel, the flow of sand being regulated or shut off by a valve (not shown) of any ordinary construction.

A shaft —p— is driven by the motor to drive the sprocket —p'—, and this through a belt and the sprocket —r— upon the brush  
85 shaft, rotates the brush —r'— to sweep the track, said brush being mounted in a suitable frame, adjustably with reference to the track.

In suitable hangers attached to the auxiliary frame, the crank-shaft —s— is mounted and —s'— is the flanger, or scraper connected  
90 to and carried by said shaft, and of substantially a mold-board pattern, and —t— is a rod connected to said shaft and to the ratchet lever —t'— by which said shaft is rotated to raise or lower said flanger.  
95

It will be evident that two smaller rotating heads can be used instead of one, any mechanic being able to make the necessary connections to the motor; also that brushes can be used on both sides, by adding another  
100

sprocket to the shaft —p— to drive the other brush; and that two flangers can be used, the other being mounted upon a separate suspension device, or both upon the same shaft.

5 What I claim as my invention, and desire to secure by Letters Patent, is—

In a snow plow a main frame mounted upon wheels and a turn table erected thereon, in combination with an auxiliary frame mounted  
10 upon said turn table a motor mounted thereon, a case carried by said auxiliary frame, a

winged head within said case operated by said motor and a rotating sweeper and a flange suspended from said frame and means for rotating said sweeper.

In witness whereof I have hereunto set my  
hand this 9th day of December, 1893. 15

WM. O. WOOD.

In presence of—

C. W. SMITH,  
HOWARD P. DENISON.