(No Model.)

# J. Q. DAY.

## RAILROAD SNOW PLOW.

No. 282,281. Patented July 31, 1883.

Fig. 1.

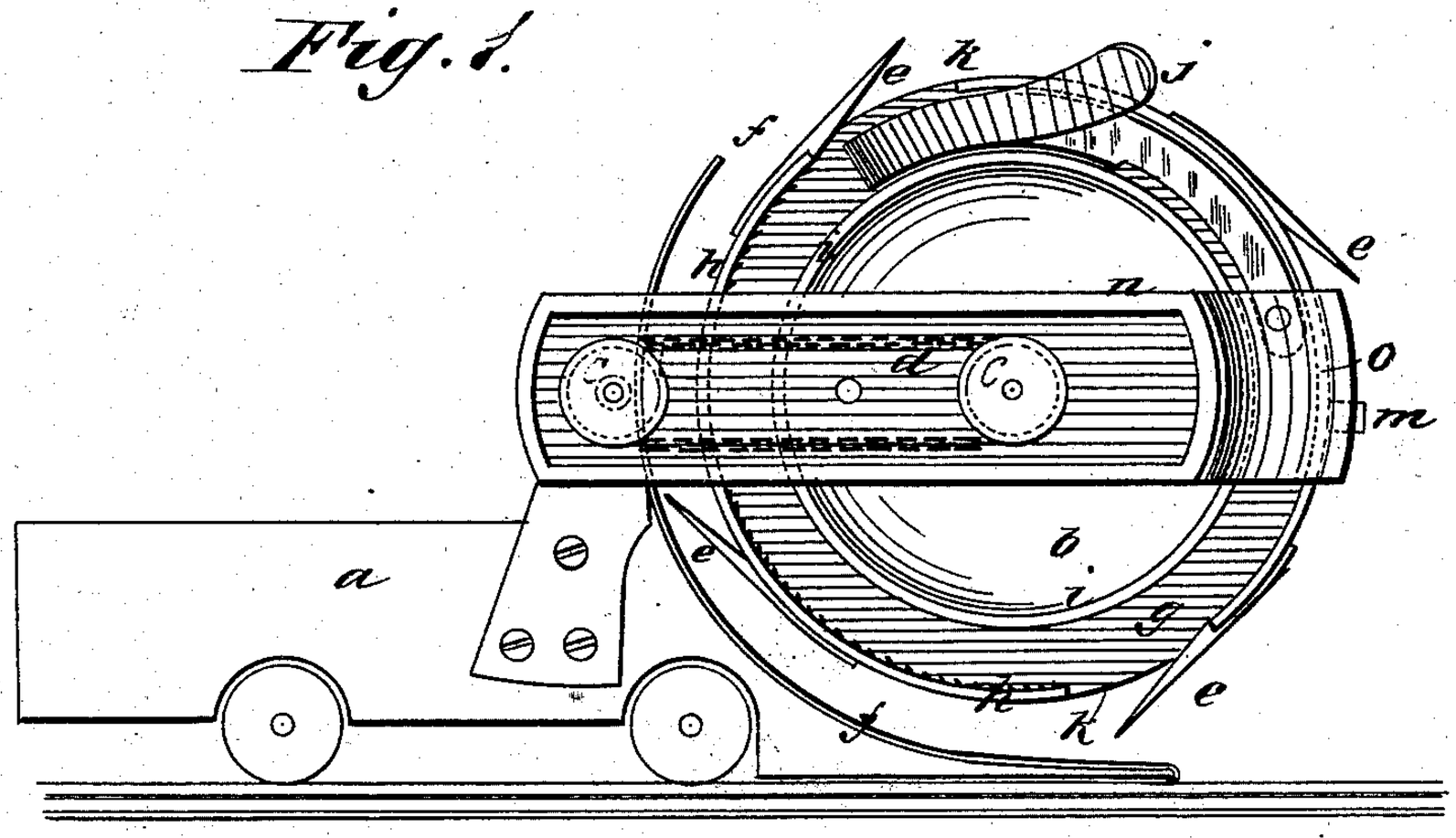


Fig. 2.

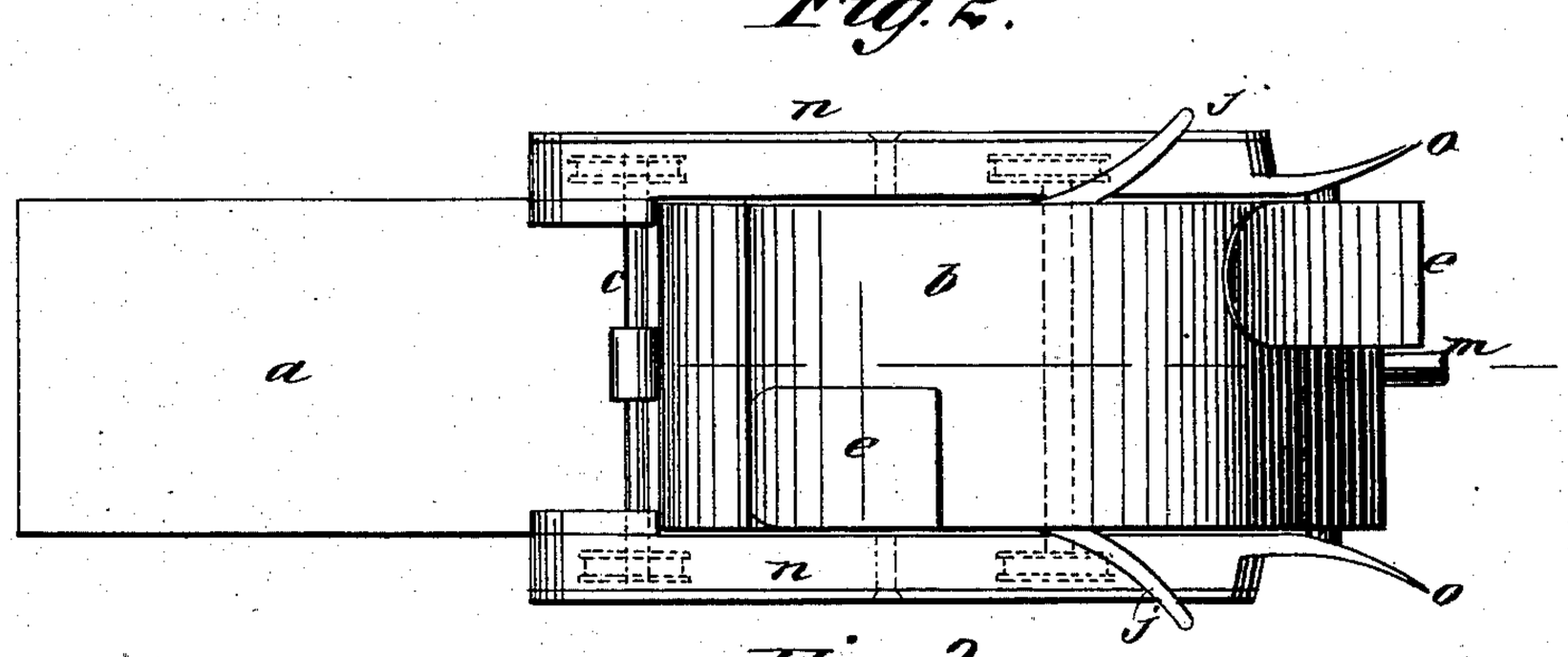


Fig. 3.

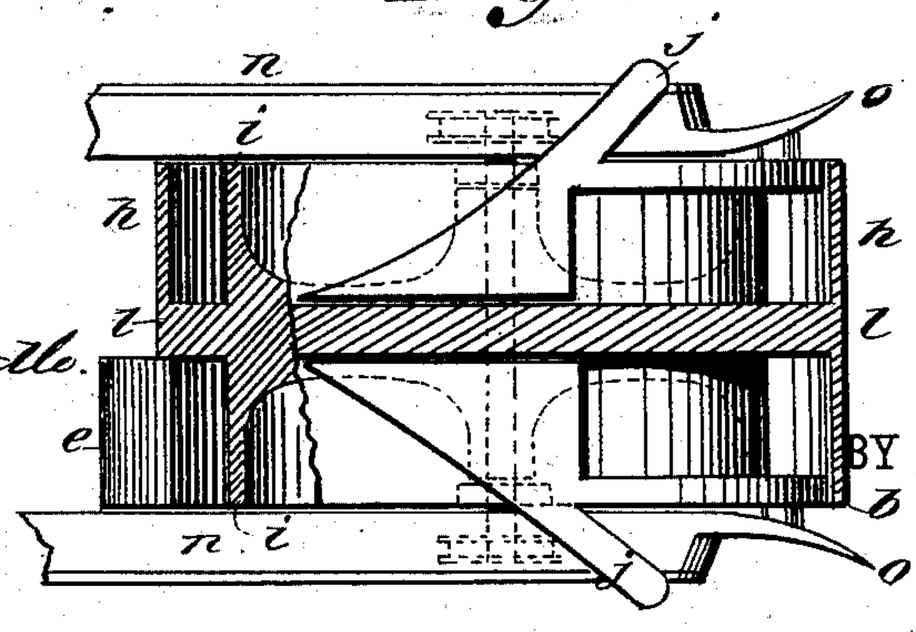


Fig. 4.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN Q. DAY, OF RED CLIFF, COLORADO.

## RAILROAD SNOW-PLOW.

SPECIFICATION forming part of Letters Patent No. 282,281, dated July 31, 1883.

Application filed August 8, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN Q. DAY, of Red Cliff, in the county of Summit and State of Colorado, have invented a new and Improved Railroad Snow-Plow, of which the following is a full, clear, and exact description.

My invention consists of a rotary plow contrived with knives or scrapers to gather the snow into annular channels of a drum or wheel carrying the scrapers, and carrying it to the top of the drum, or thereabout, where stationary chutes discharge it from the channels and throw it off at the sides of the road, as hereinafter fully described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of my improved snow-plow. Fig. 2 is a plan view, and Fig. 3 is partly a plan and partly a horizontal section, of the rotary wheel or drum of the plow.

On any suitable platform-car, *a*, I mount a rotary drum, *b*, at the front of the platform, and with suitable gear, *c* and *d*, for being rotated by an engine mounted on the platform. The drum is provided with scrapers *e*, which, together with the concave front *f* of the truck, gather the snow into the annular channels *g*, between the outer flanges, *h*, and inner flanges, *i*, to be carried up therein against the stationary chutes *j*, by which the snow is scraped out of the channels *g* and projected off to the sides of the road. The outer flanges, *h*, have openings at *k*, in front of the scrapers *e*, for the snow to pass into the channels. As the middle partition, *l*, prevents the scrapers of each side of the drum from working to the center of the road and scraping the snow entirely away, I have attached a series of wedge-shaped projections, *m*, to the outer periphery of the outer rim, to divide the snow at the middle and press it each way into the range of the scrapers *e*.

The supporting-arms *n* for the drum are made hollow, in order to run the pitch-chains *d*, which drive the drum, in them for protection from the snow. At the forward ends these arms have flaring plates *o*, to gather in the snow from a wider range than the drum-scrapers *e* can reach.

I propose to corrugate the inner surface of the outer flanges, *h*, to hold the snow, so that its inertia will not prevent the drum from carrying it up to the chutes *j*.

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

1. The combination, with a car having a concave front, *f*, of a rotary drum located in advance of the concave, and having scrapers *e*, channels *g*, and discharging-chutes *j*, substantially as described.

2. The rotary drum having inner side flanges, *i*, outer flanges, *h*, scrapers *e*, and dischargers *j*, in combination with a platform or other car having a concaved front, *f*, substantially as described.

3. The combination of the studs *m* with the rotary drum having scrapers *e* and channels *g*, substantially as described.

4. The combination of the rotary drum, having channels *g* and scrapers *e*, with a car having the concave front *f* and the hollow supporting-arms *n*, with driving-chains arranged therein for working the drum, substantially as described.

5. The combination of flaring plates *o* on the bearing-arms *n* with the rotary drum having channels *g* and scrapers *e*, substantially as described.

6. The rotary drum having channels *g* and scrapers *e*, with openings *k* into said channels, located relatively to said scrapers substantially as described.

7. The combination, with the drum having channels *g*, of the outer and inner flanges, *h i*, and the stationary chutes *j*, whereby the snow may be taken out of the channels *g* and cast to the sides of the road, as described.

8. The combination, with the scrapers *e* on rotary drum, of the outwardly inclined or flaring plates *o*, arranged to bring the snow for a short distance on each side of the track within range of the scrapers, as described.

9. The drum having the outer flange, *h*, corrugated on the inner surface to take a bite or better hold on the snow to facilitate its upward transportation, as described.

JOHN Q. DAY.

Witnesses:
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