

D. TOWNSEND.
Improvement in Machine for Removing Snow from
Railroads.

No. 132,502.

Patented Oct. 22, 1872.

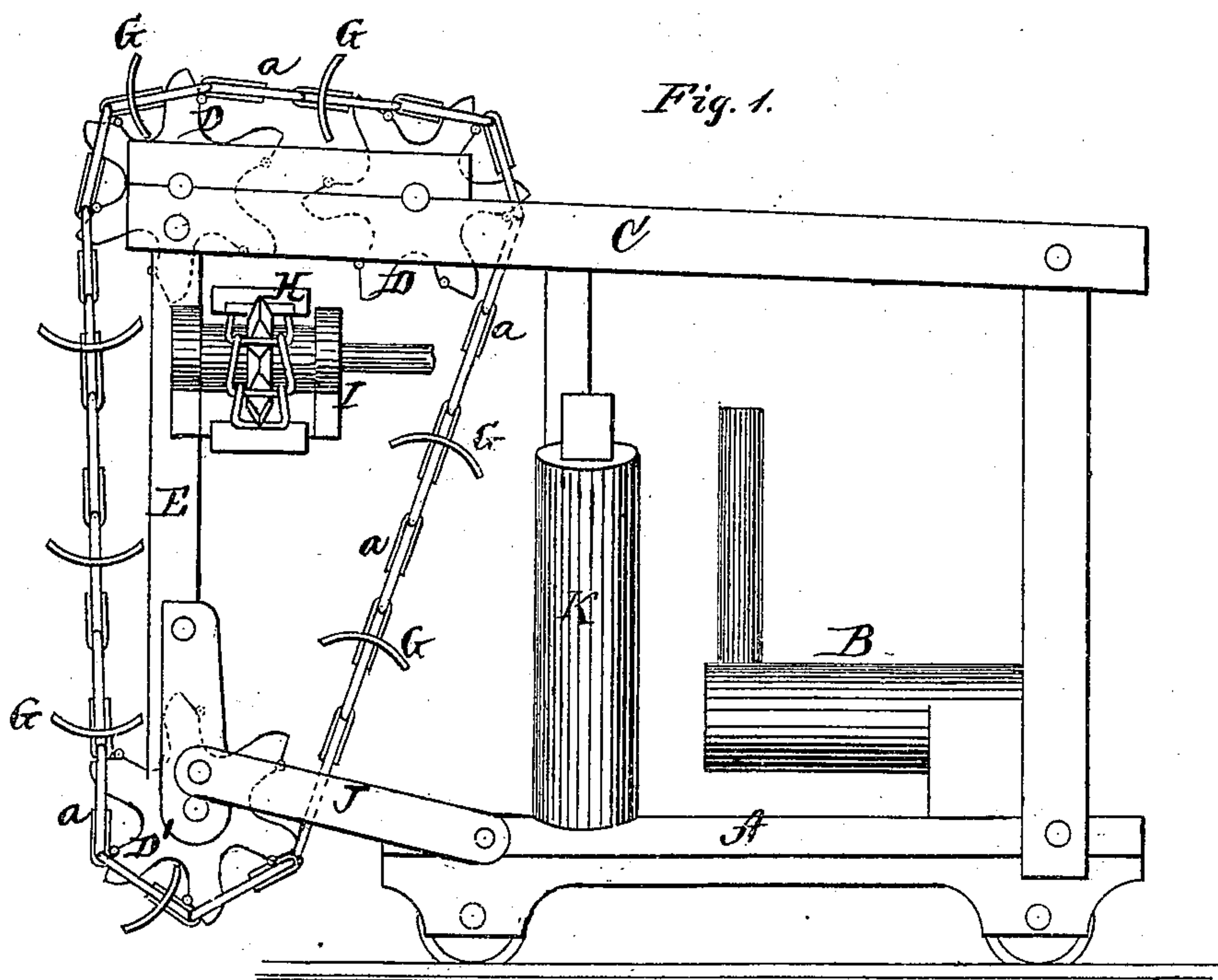
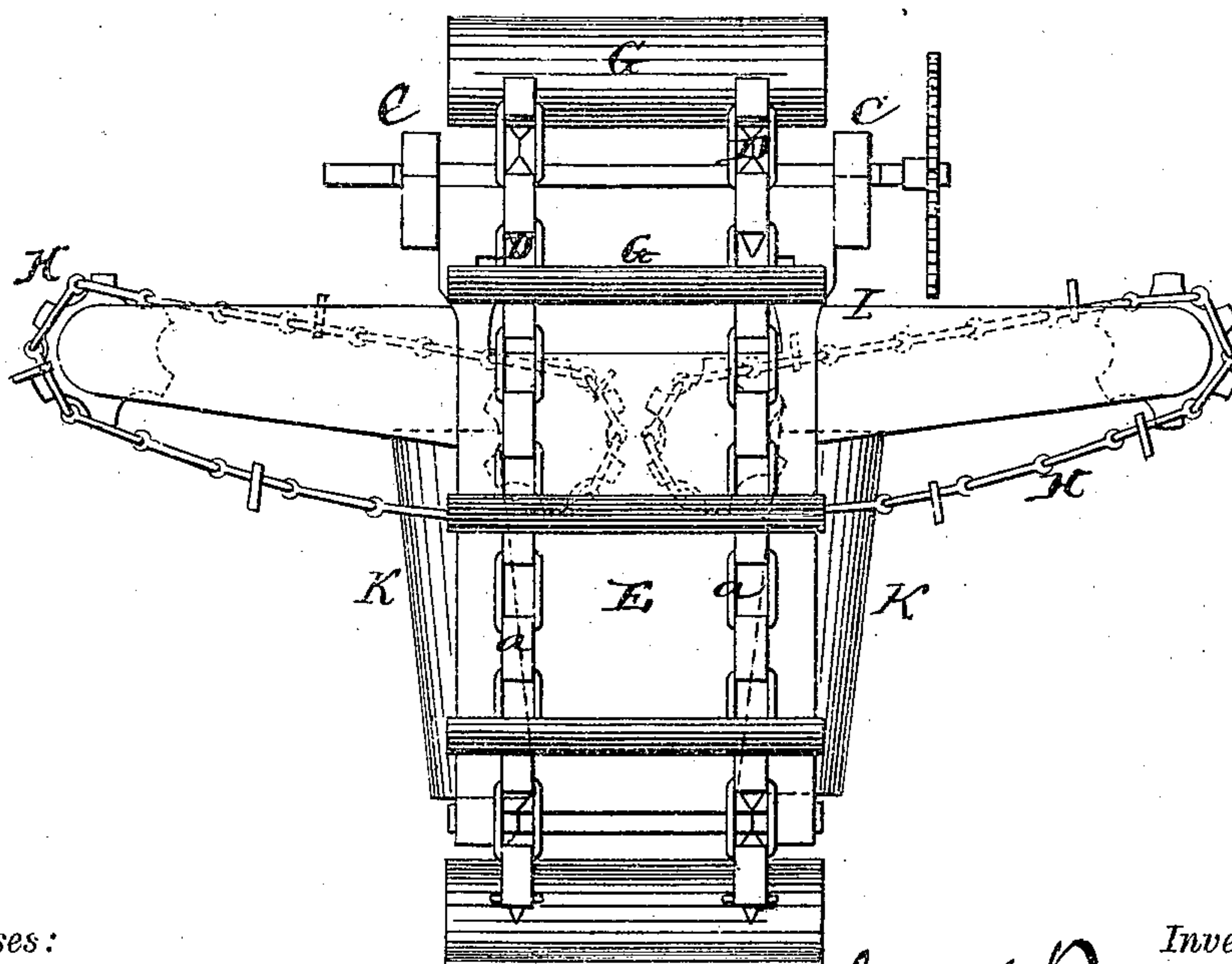


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

DAVID TOWNSEND, OF MORRISON, ILLINOIS.

IMPROVEMENT IN MACHINES FOR REMOVING SNOW FROM RAILROADS.

Specification forming part of Letters Patent No. 132,502, dated October 22, 1872.

To all whom it may concern:

Be it known that I, DAVID TOWNSEND, of Morrison, in the county of Whitesides and in the State of Illinois, have invented certain new and useful Improvements in Machines for Removing Snow from Railroads; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a snow-excavator, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation, and Fig. 2 is a front view of my machine.

A represents a common platform-car, upon which is located an engine, B, for moving the car along, and also for operating the excavator, which two objects are accomplished by suitably-arranged gearing of any convenient description. Elevated above the car A, and supported on suitable standards on the same, is a frame, C, extending in front of the car sufficiently far to receive two spiders, D D, one in front of the other, and both located in front of the car. From the front end of the frame C an apron, E, extends perpendicularly downward, and at the lower end thereof is a spider, D'. Around the spiders D D and D' are placed two endless chains, *a a*, which carry a series of buckets, G G, connecting and extending across and beyond the chains, as shown. The apron E forms a back to said buckets as they move upward. The spiders D D are

placed sufficiently far apart to allow the snow carried up by the buckets G G to be discharged between them and fall down onto endless conveyers H H, which carry it out toward both sides and drop it a suitable distance beyond the track. These conveyers H H are arranged in a frame, I, attached to the back of the apron E, and their outer ends raised or elevated higher than their inner ends, as shown in Fig. 2. J J are braces connecting the lower end of the apron E with the front end of the car to steady and support said apron and the parts connected therewith. The car with the entire excavator may be moved forward by a locomotive-engine attached to the rear end of the car, if desired. On each side of the excavator is a roller, K, set at angle, as shown in Fig. 2, for the purpose of pressing back the snow on the sides to prevent the banks from caving in.

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

1. The combination of the endless chains *a a* with buckets G G and the endless conveyers H H, constructed and arranged substantially as herein set forth.

2. In combination with the chains *a a* and buckets G G, the apron E, forming a back for the buckets, substantially as herein set forth.

3. In combination with a snow-excavator the rollers K K, set at an angle as shown, one on each side of the excavator, for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of July, 1872.

DAVID TOWNSEND.

GEO. H. FAY,
W. G. HITCHCOCK.