

(No Model.)

2 Sheets—Sheet 1.

C. & W. PAULITSCHKY.  
MACHINE FOR REMOVING SNOW FROM RAILWAYS AND TRAMWAYS.  
No. 441,442. Patented Nov. 25, 1890.

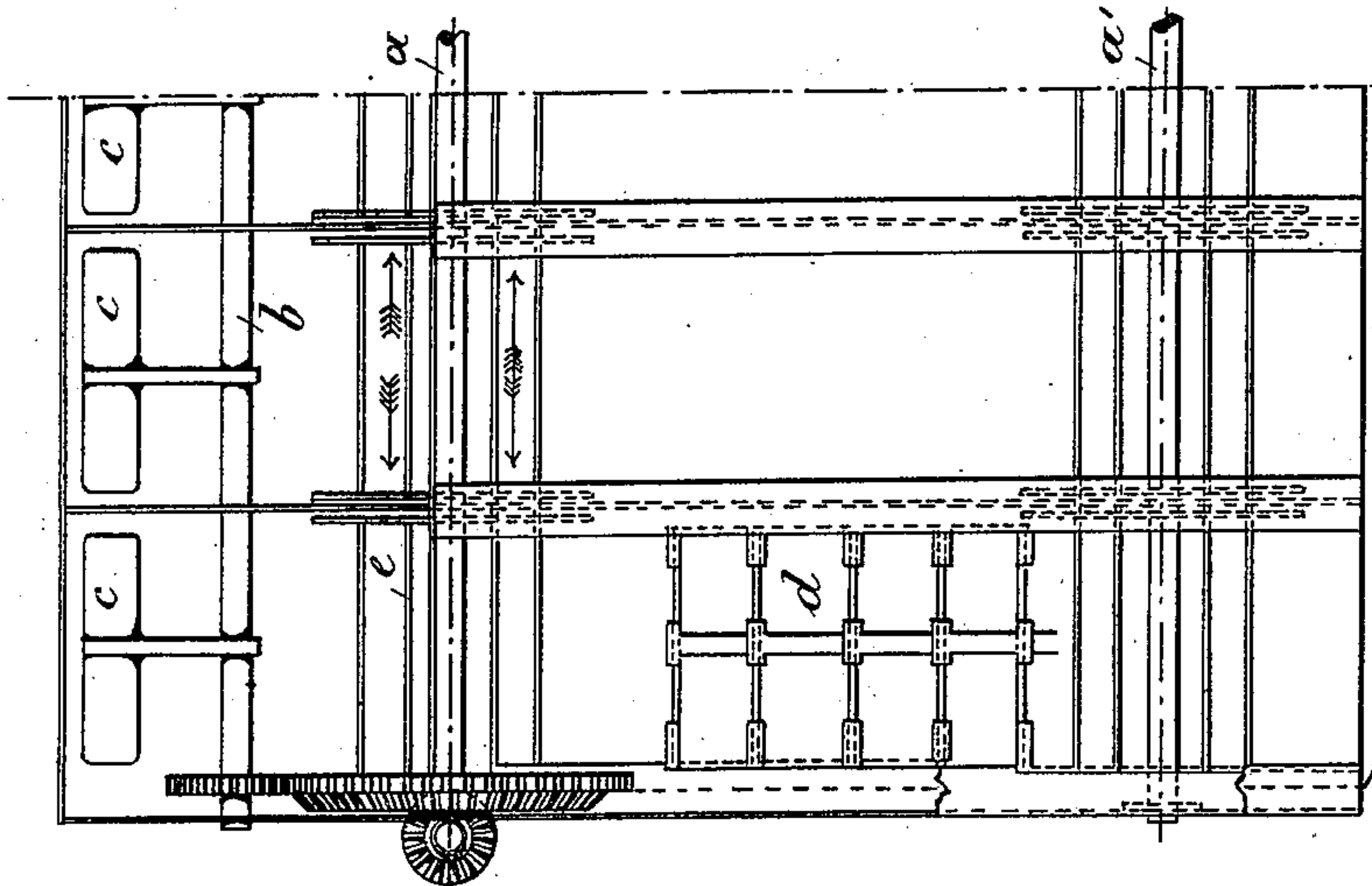


Fig. 3.

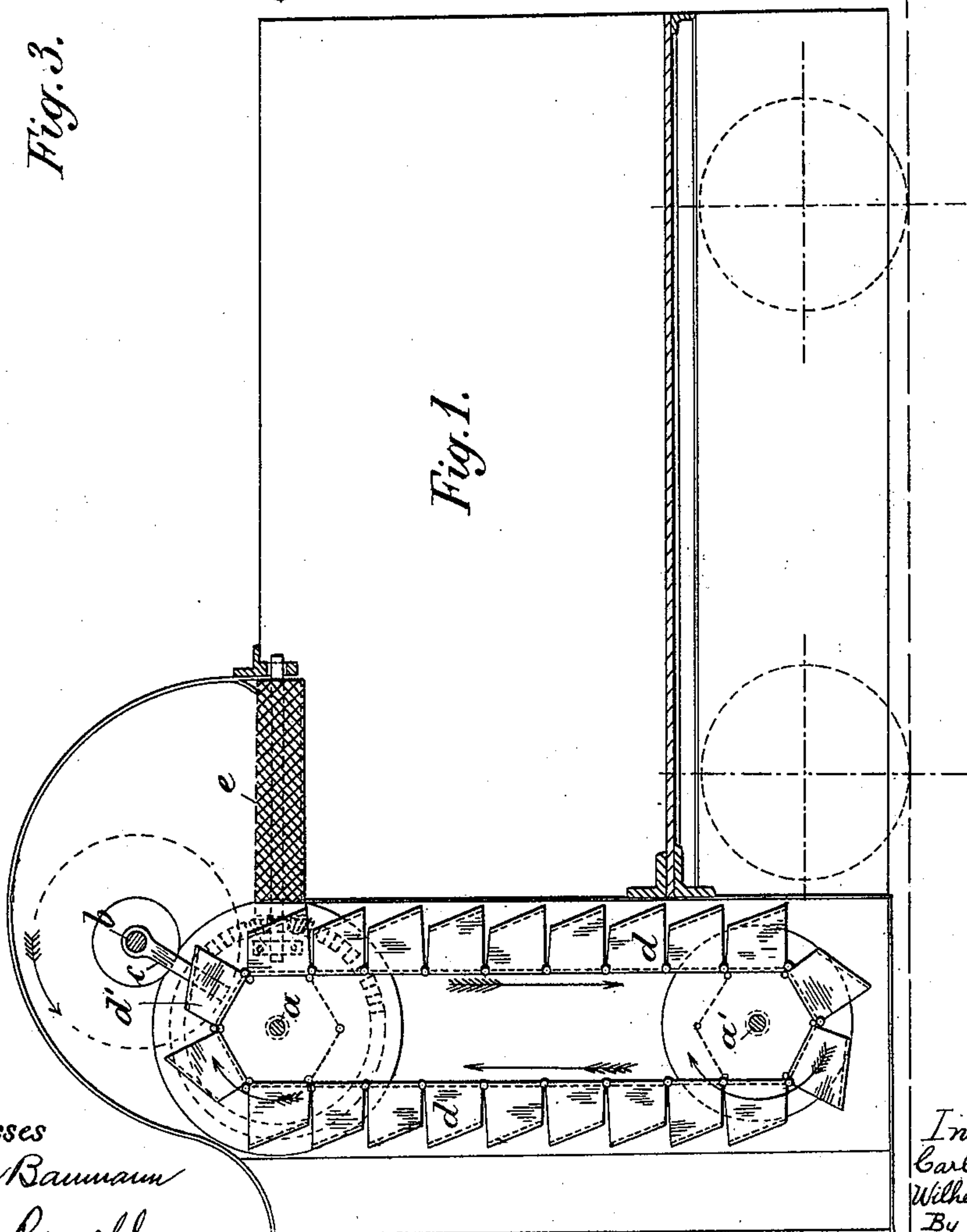


Fig. 1.

Witnesses  
George Baumann  
John Revell

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Carl Paulitschky  
Wilhelm Paulitschky  
By their Attys.

Howden and Howden

(No Model.)

2 Sheets—Sheet 2.

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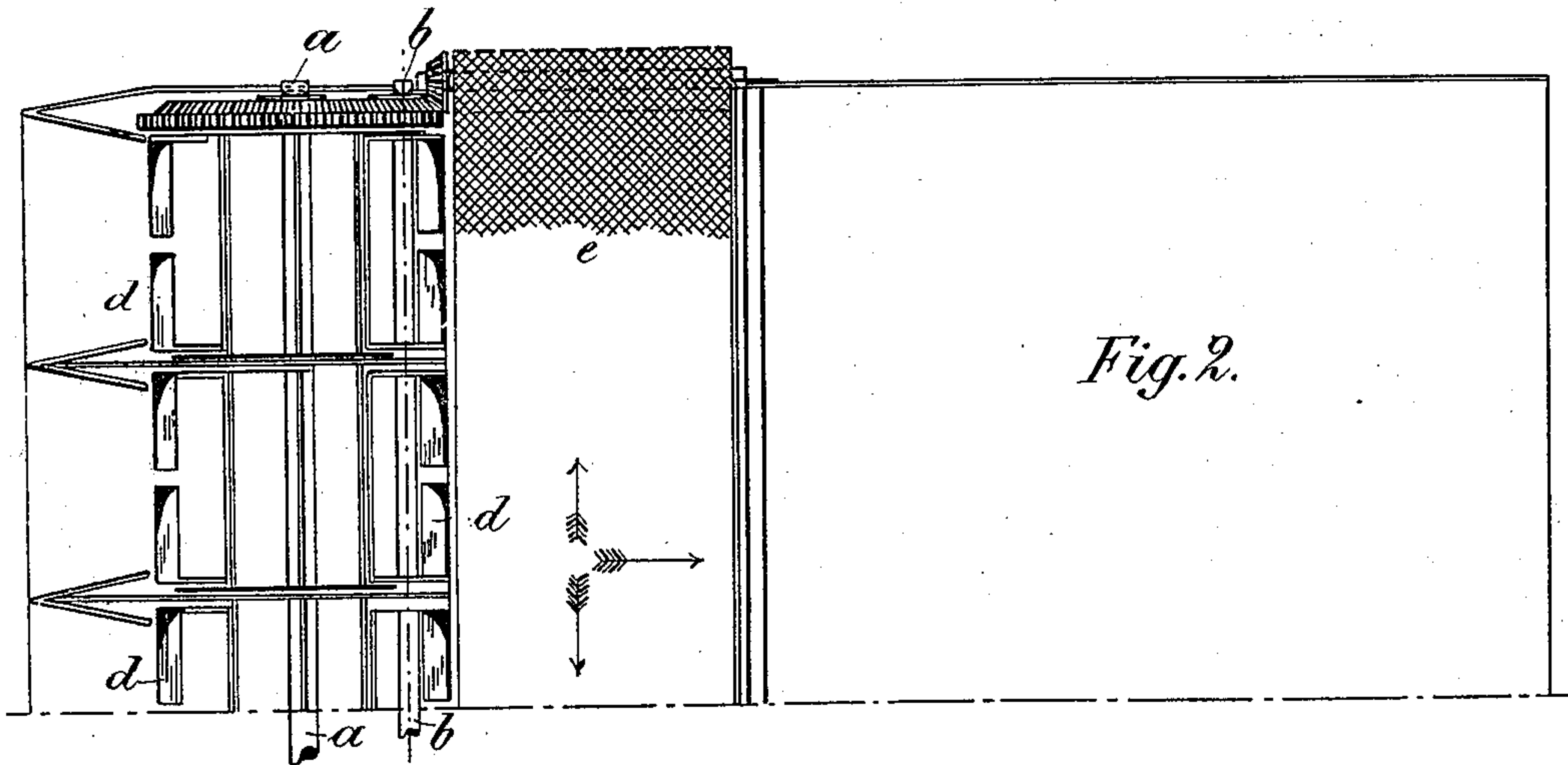


Fig. 6.

Fig. 7.

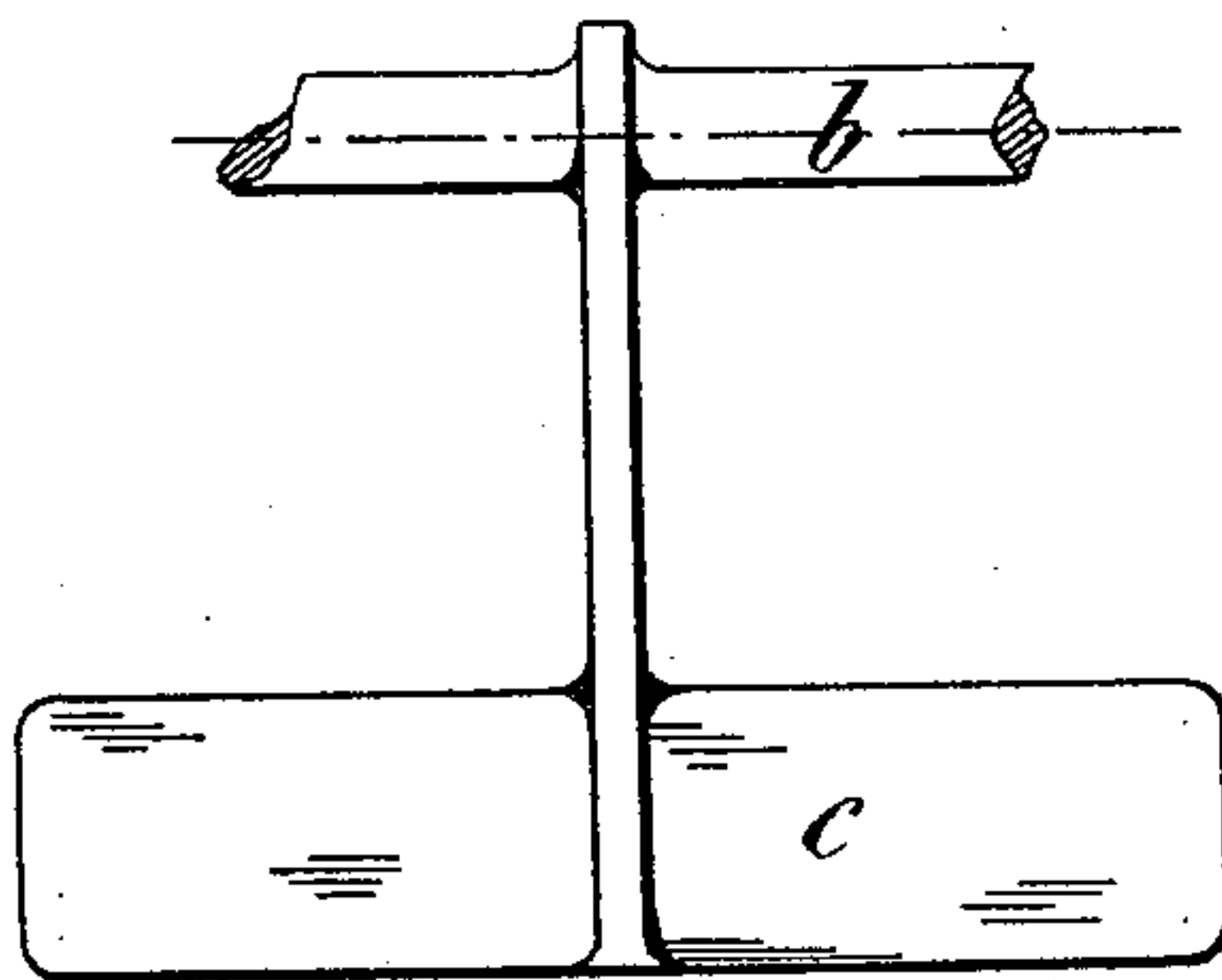


Fig. 4.

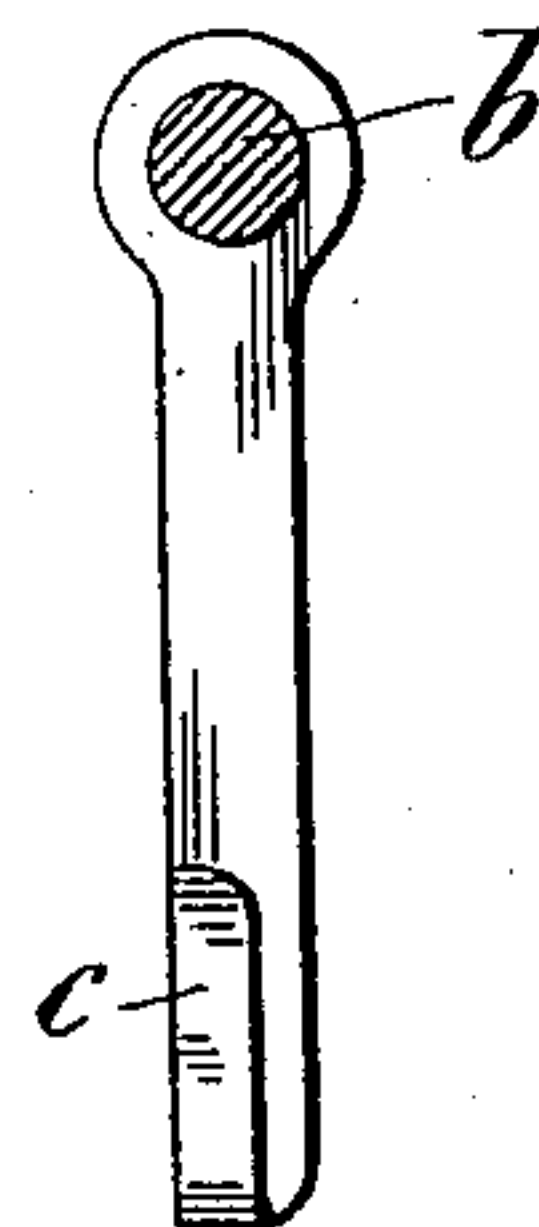
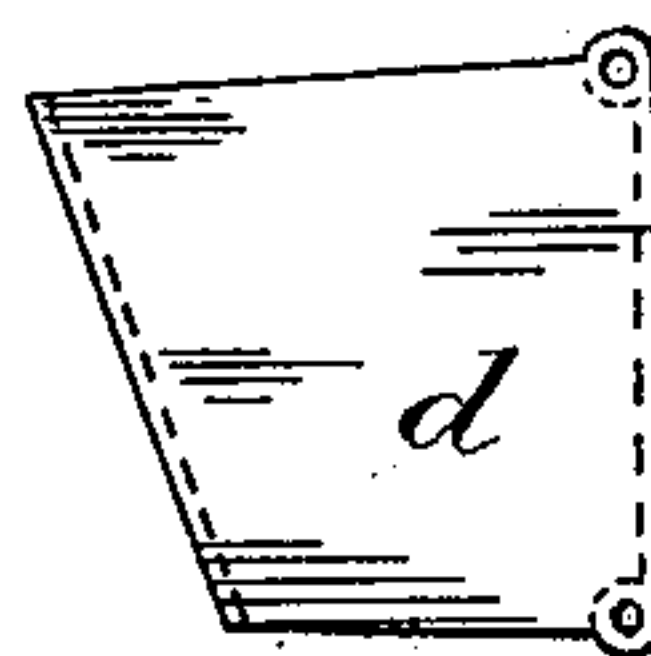
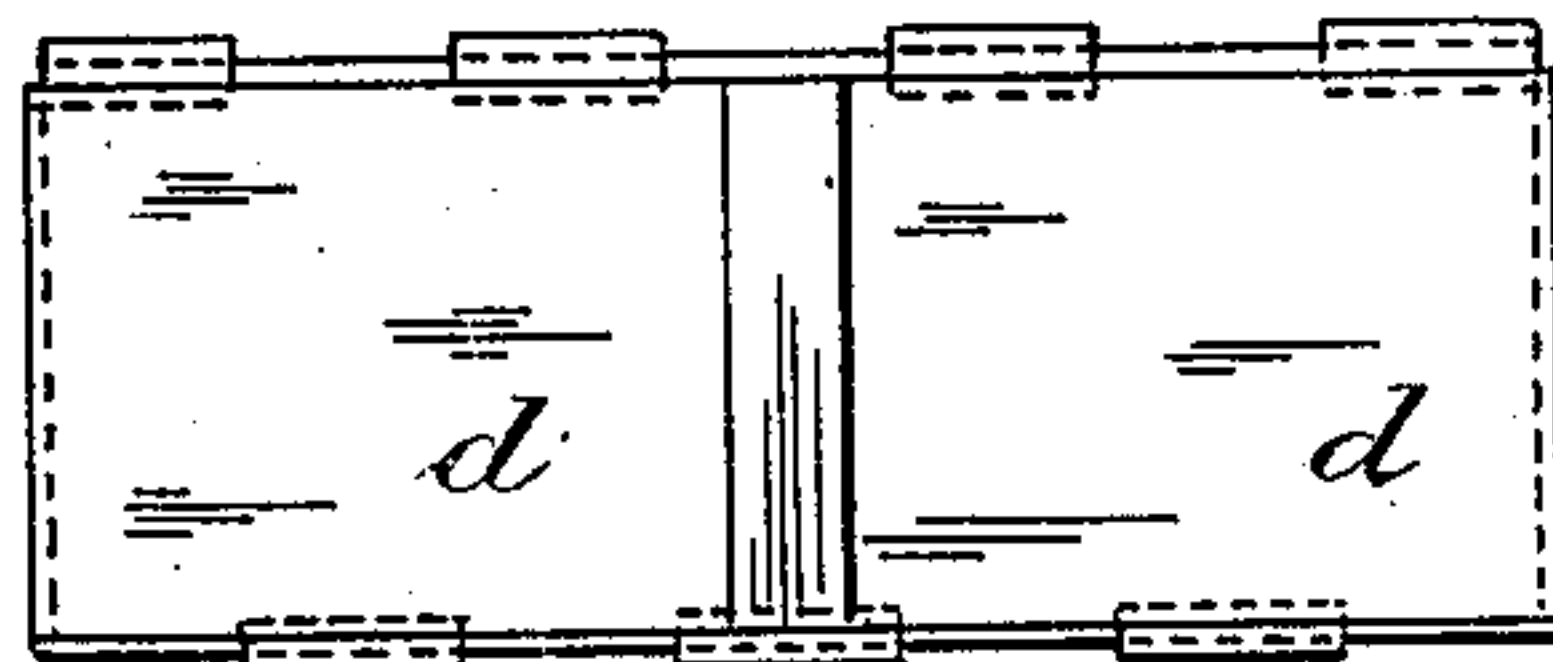


Fig. 5.



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# UNITED STATES PATENT OFFICE.

CARL PAULITSCHKY AND WILHELM PAULITSCHKY, OF VIENNA, AUSTRIA-HUNGARY.

MACHINE FOR REMOVING SNOW FROM RAILWAYS AND TRAMWAYS.

SPECIFICATION forming part of Letters Patent No. 441,442, dated November 25, 1890.

Application filed April 28, 1890. Serial No. 349,744. (No model.)

*To all whom it may concern:*

Be it known that we, CARL PAULITSCHKY and WILHELM PAULITSCHKY, subjects of the Emperor of Austria-Hungary, and residents of the city of Vienna, in the Empire of Austria-Hungary, have invented an Improved Machine for Removing Snow on Railways and Tramways, of which the following is a specification.

Our invention relates to an improved machine with chain buckets mounted on a suitable vehicle for removing snow on railways worked by steam or electricity and on tramways.

We will proceed to describe the same with reference to the accompanying drawings, in which—

Figure 1 shows a longitudinal section, Fig. 2 a plan, and Fig. 3 a front view, with the chain buckets partly removed. Fig. 4 is a front view, and Fig. 5 a side view, of one of the buckets drawn to a larger scale. Fig. 6 is a front view, and Fig. 7 a side view, of one of the snow-clearers.

The working part thereof consists of several endless-chain buckets arranged side by side in front of the machine, the buckets *d* being connected to endless chains, bands, or equivalent parts passing over drums in the usual manner, whose shafts *a a'* are carried by the framing of the machine and receive rotary motion from a suitable motor-engine. The buckets *d* have either no bottom, or, if they have such, they are free to turn on hinges at the inner side. The outer side of the bucket is slotted at the middle, as shown at Figs. 4 and 5, which show a front and side view of a detached bucket to a larger scale.

Above the upper shaft *a* of the chain buckets is a second shaft *b*, mounted in bearings in the framing, on which the snow-clearers *c* are situated, there being one for each set of chain buckets. Figs. 6 and 7 show such a snow-clearer in front and side view to an enlarged scale.

The action of the machine is as follows: The snow scooped up by the ascending buckets is carried up in them, remaining therein even if they have no bottom, as it readily

cakes together, and when the buckets have arrived in the position *d'*, Fig. 1, the snow-clearer *c* in passing through the bucket clears the snow out of the same onto an endless traveling web *e*, situated behind the buckets, the broad blade of the clearer being made to pass through the open bottom of the bucket, while the stem thereof passes through the slot in the outer side thereof. If the bucket has a hinged bottom, as above stated, this is first forced open by the passage of the blade.

It will be seen that with the above-described arrangement of the clearer the buckets are effectually cleared of snow every time, while with the snow-dredging machines heretofore constructed no suitable arrangement has been provided for clearing the buckets of the snow, and, as they consequently gradually become choked with caked snow, they soon become inoperative.

The shaft *b* of the snow-clearer is driven from the shaft *a* by suitable speed-increasing gearing, as shown on the drawings in the proportion of one to six.) The endless traveling web *e* is also driven from *a* by means of bevel-gear. The web *e* is arranged so as to deliver the snow to the side where it does not interfere with the traffic.

We claim—

1. A snow-dredging apparatus having an endless chain of buckets, the said buckets open at the top and bottom, and a clearer adapted to enter the bottom of the bucket and force out the contents thereof through the top, substantially as set forth.

2. A dredging-machine comprising an endless chain of buckets, slots in the outer side of each bucket, and a clearer consisting of a rotating stem adapted to pass through the slots in the buckets and provided with blades to force out the contents of the buckets.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

CARL PAULITSCHKY.

WILHELM PAULITSCHKY.

Witnesses:

T. G. HARDY,

E. G. J. MOELLER.