No. 802,743. PATENTED OCT. 24, 1905.

I. W. EVERY.

SCRAPER.

APPLICATION FILED FEB. 28, 1905.

Fig. 1.

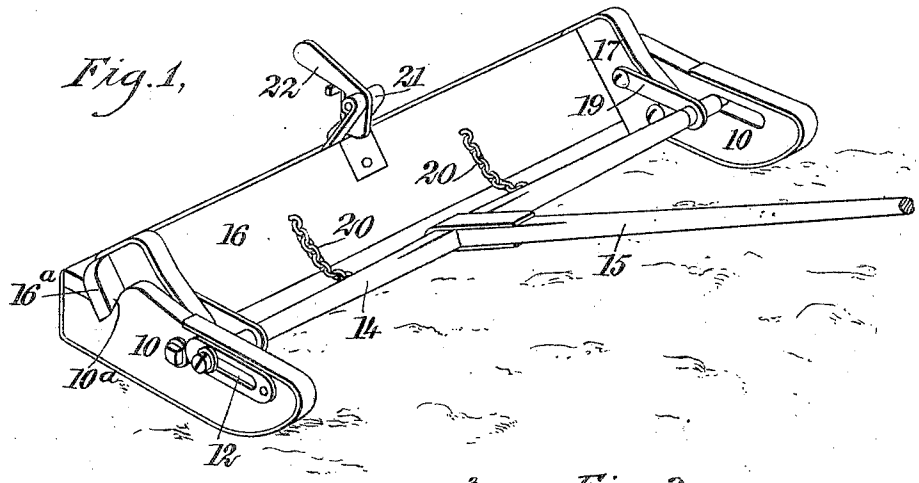


Fig. 2.

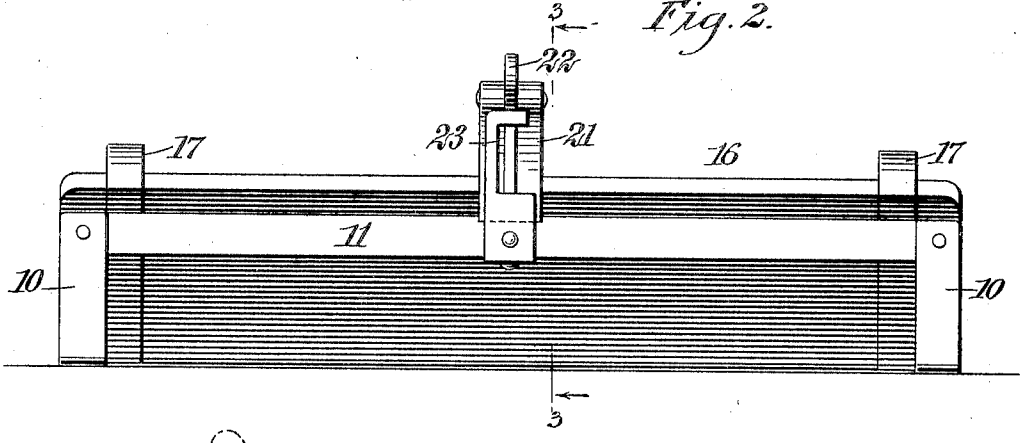
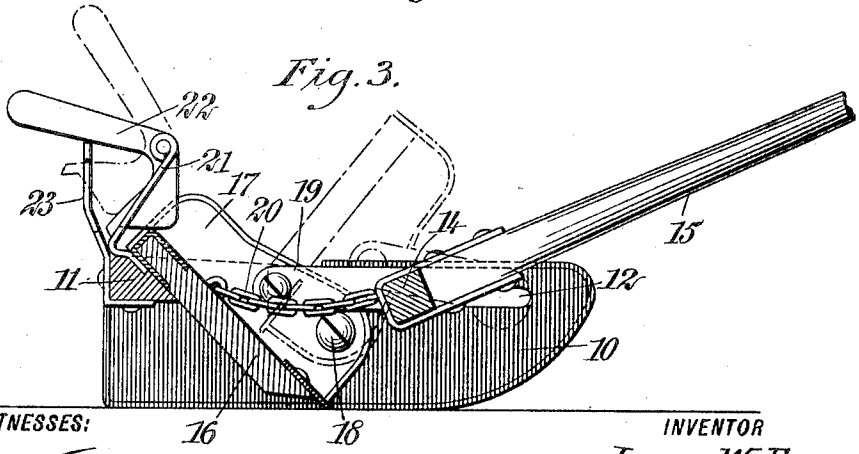


Fig. 3.



WITNESSES:

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SCRAPER.

No. 802,743. Specification of Letters Patent. Patented Oct. 24, 1905.

Application filed February 28, 1905. Serial No. 247,674.

To all whom it may concern:

Be it known that I, ISAAC W. EVERY, a citizen of the United States, and a resident of Athens, in the county of Greene and State of New York, have invented a new and Improved Scraper, of which the following is a full, clear, and exact description.

My invention relates to a scraper intended especially for removing snow from ice or other surfaces. The invention is, however, useful in connection with other materials, as will be apparent to persons skilled in the art.

In its preferred embodiment the invention comprises a carriage formed of two runners with a rigid connection between them. On the runners is arranged a movable draft-bar, and to this bar is connected a scraper proper, which is normally held rigid with the carriage, but which upon the release of a latch is drawn by the draft-bar into dumping position. The operation is therefore entirely automatic except for the manual operation of the latch.

Reference is had to the accompanying drawings, which illustrate as an example the preferred embodiment of my invention, in which drawings like numerals of reference indicate like parts in the several views, and in said drawings—

Figure 1 is a perspective view showing the invention in operative adjustment. Fig. 2 is an enlarged rear elevation of the same, and Fig. 3 is a sectional view of the invention on essentially the line 3 3 of Fig. 2 and indicating by broken lines the dumping action of the scraper.

The carriage is formed of two parallel side runners 10 of suitable construction and rigidly connected together by a cross-bar 11, located at the rear portions of the runners. The runners 10 are formed with longitudinal slots 12, which rigidly receive the end portions of a transverse draft-bar 14. Said draft-bar 14 has a pole 15 attached thereto, and this pole is adapted to have a team of horses or any other propelling means connected therewith.

The scraper proper comprises a transversely-extending body-plate 16, which lies between the runners 10 and is formed at the ends with side plates 17. At the ends the scraper-plate 16 is also provided with extensions 16^a, which are adapted when the scraper is in active position to rest in notches or seats 10^a, formed in the runners 10. This arrangement, with the assistance of a latch to be hereinafter described, serves to hold the scraper-plate securely in active position. The scraper proper is pivotally mounted on the runners 10 by means of bolts or pivot-pins 18, which pass through the side flanges 17 into the runners, as shown. Pivotally attached to each side plate or flange 17 is a link 19. These links extend forward and have pivotal connection with the draft-bar 14, as shown. The draft-bar is also connected with the scraper-plate 16 by means of chains 20, and the points of connection of said links 19 and chains 20 with the scraper are above the point of the pivot 18, so that when strain is exerted on said links and chains the scraper will be given a turning movement around its pivot. Rising from the draft-bar 11 is a bracket 21, and on said bracket is pivotally mounted a latch 22.

23 indicates a stop for limiting the movement of the latch. Said latch is intended to engage the upper edge of the scraper-plate 16, and when the latch is in active position the scraper-plate is held securely, with the extension 16^a seated in the notches 10^a of the runners 10. When in this position, a draft exerted on the pole 15 will cause the apparatus to be drawn over the surface on which it bears, and the scraper will operate to remove the accumulations of snow from said surface. When it is desired to dump the snow from the scraper, the latch 22 should be manually raised to the dotted position shown in Fig 3, and then the draft being continued on the pole 15 and bar 14 the said draft will be communicated directly to the scraper-plate 16 through the links 19 and chains 20, and said scraper-plate will thus be caused to rock over to the dumping position. (Shown by the broken lines in Fig. 3.)

In the use of the invention, therefore, the parts should be adjusted as shown in Fig. 1 and the apparatus drawn over the surface to be cleaned. When the dumping-point is reached, the draft on the pole 15 should be discontinued and the operator should then raise the latch 22. This will dump the scraper-plate, as before described, and then to return the parts to active position the team should be backed sufficiently to allow the scraper-plate to return to the position shown in Figs. 1 and 3, and then the latch 22 should be turned to lock the scraper-plate in its active position.

Various changes in the form, proportions, and minor details of my invention may be resorted to at will without departing from the

spirit and scope thereof. Hence I consider myself entitled to all such variations as may lie within the terms of my claims.

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

1. In a scraper, the combination of a carriage formed of side runners and a rigid connection between them, a draft-bar extending between the runners and slidably mounted thereon, a scraper-plate extending between the runners and having flanges at its ends pivotally connected with the runners, a connection between the scraper-plate and the draft-bar, and a means for releasably holding the scraper-plate in active position.

2. In a scraper, the combination of a carriage composed of side runners and a rigid cross connection between them, said runners having seats of cavities therein, a scraper-plate extending between the runners and having extensions adapted to rest in said seats of the runners, means for pivotally mounting the scraper-plate on the runners, a draft means having connection with the scraper-plate, and a means for releasably holding the scraper-plate in rigid connection with the carriage.

3. In a scraper, the combination of a carriage formed of side runners and a connection between them, a draft means extending between the runners and slidably mounted thereon, a scraper-plate extending between the runners and having flanges at its ends pivotally connected with the runners, a connection between the scraper-plate and draft means, and a latch mounted on the carriage and adapted to engage the scraper-plate to hold the same releasably in active position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ISAAC W. EVERY.

Witnesses:
F. H. EICHHORN,
F. S. HOWLAND.