

(No Model.):

L. HALLOWELL.

ICE SCRAPER.

No. 279,645.

Patented June 19, 1883.

Fig. 1.

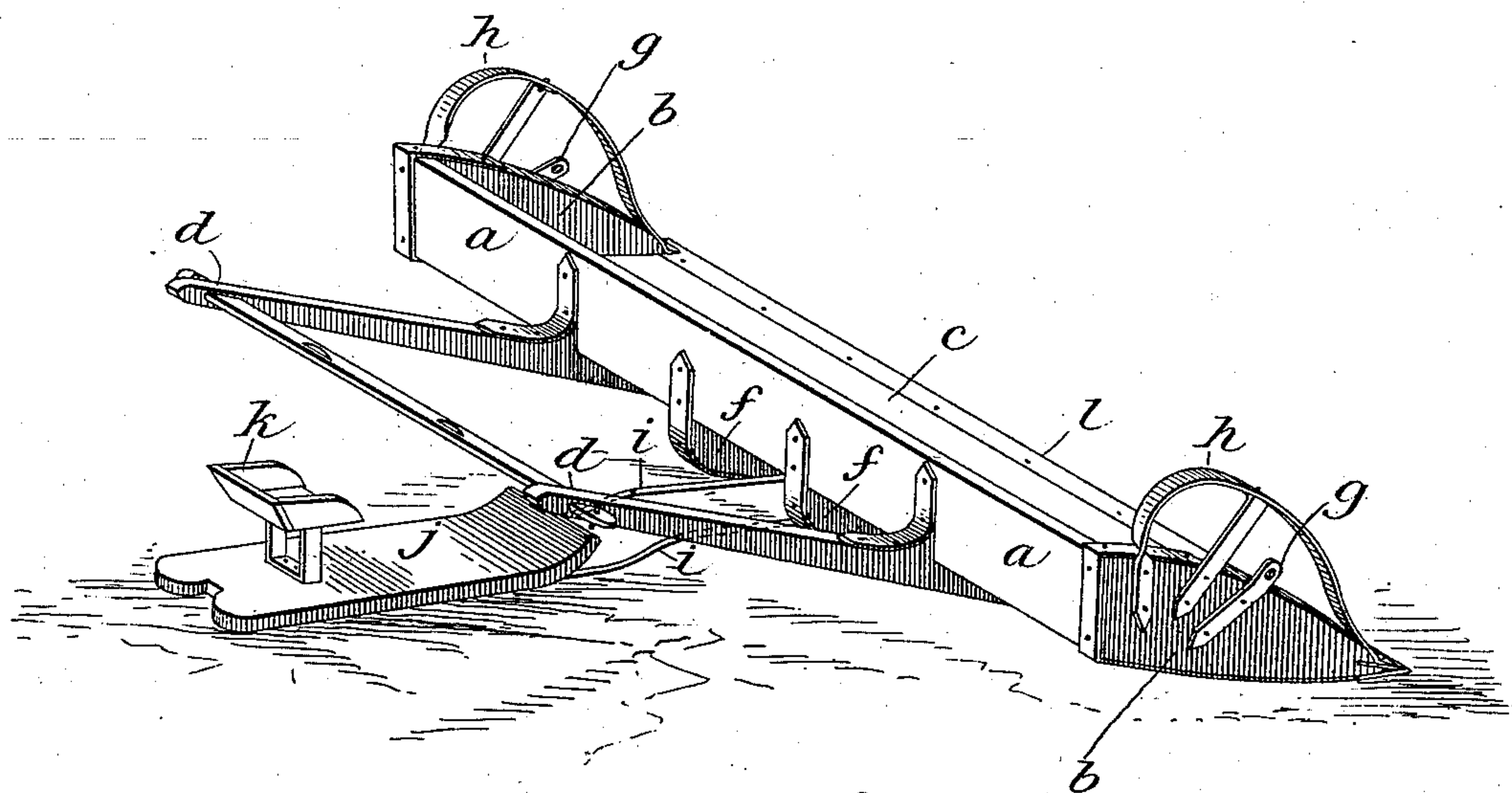
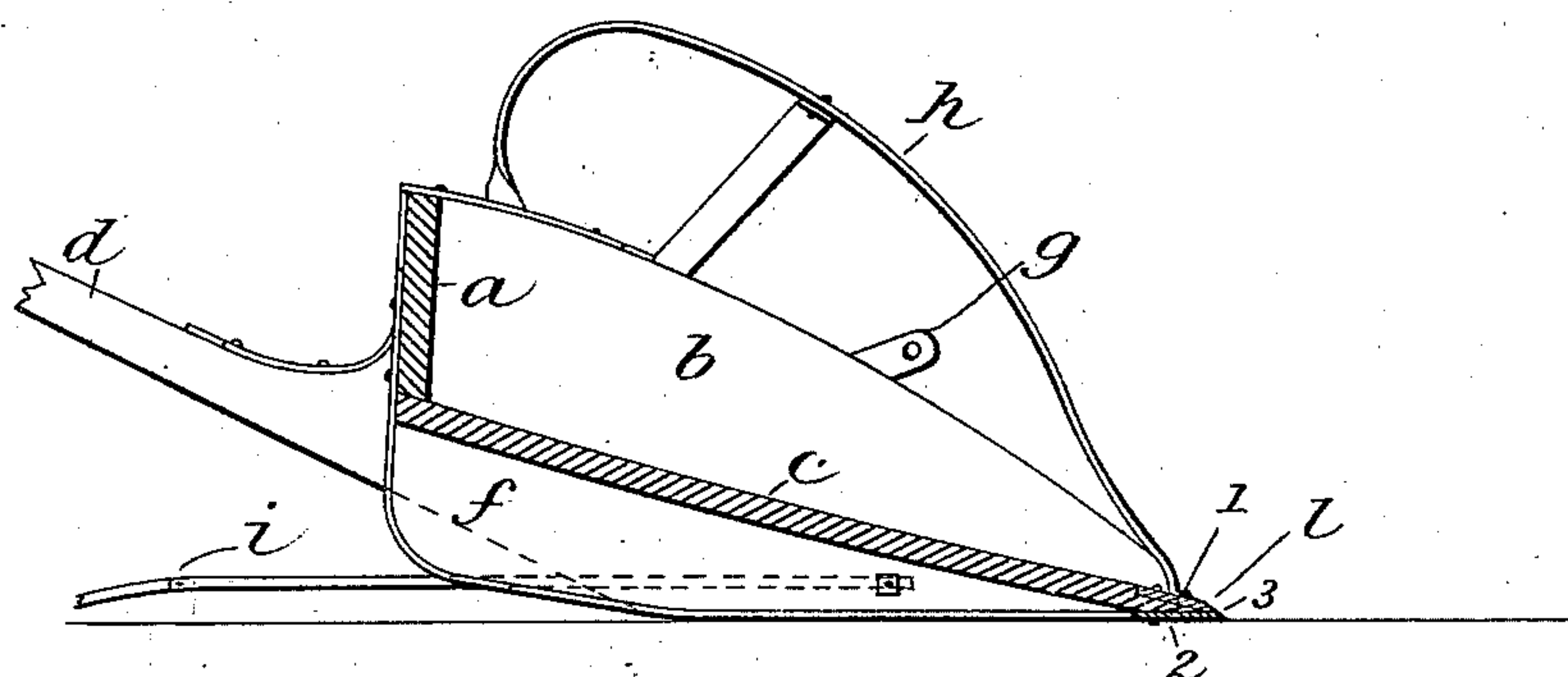


Fig. 2.



Witnesses:

Edw L Whitcomb
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Att'y

UNITED STATES PATENT OFFICE.

LEVI HALLOWELL, OF CHINA, MAINE.

ICE-SCRAPER.

SPECIFICATION forming part of Letters Patent No. 279,645, dated June 19, 1883.

Application filed February 20, 1883. (No model.)

To all whom it may concern:

Be it known that I, LEVI HALLOWELL, of China, in the county of Kennebec and State of Maine, have invented a new and useful Improvement in Ice-Scrapers, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a view in perspective, and Fig. 2 a sectional view showing the construction and application of the edge of the scraper.

The object of my invention is to make a scraper that will slide over the surface of the ice without cutting into the same, that will fill readily, and one that can be operated by one man with very little labor.

In Fig. 1, *a* is the back, *b b* the sides, *c* the bottom, and *d d* the handles, of the scraper. *h h* are two guards, upon which the scraper runs when tipped over to discharge the load. *g g* are straps, to which the horses are attached to draw the scraper. The handles *d d* pass under the bottom of the scraper, and, together with the parts *f f*, serve as supports or runners for the scraper when filling. *j* is a drag having thereon the seat *k*, upon which the operator rides. This is connected to the scraper by the jointed rods *i i*.

The construction of the runners *f f* and the application of the scraper-edge *l* are shown in Fig. 2, in which *c* is the bottom of the scraper, *f* the runner, and *l* the edge. This edge, made of iron or steel, is composed of the two straps 1 and 2, bolted through the wooden part of the scraper, and so applied that while the upper surface shall form substantially a plane with the upper surface of the bottom of the scraper *c* the lower part, 2, forms an angle with the under surface of the bottom *c*. The runners *f f* and handles *d d* are so constructed that their lower edges and the under surface of the strap 2 are in the same plane, so that when the scraper is drawn over the ice it takes up all the snow, but has no tendency to cut into it. The edge is beveled at 3, and the snow fills the scraper, there being no obstruction on the upper surface.

The operator rides upon the drag *j*, and when required can lift the handles and dump the load. The scraper, remaining upside down, slides upon the guards *h h*, and is tipped back when required.

The construction of the scraper is substantially the same as an ordinary one, except the construction of the edge *l*, and its application to the scraper, in combination with the runners *f f* and the handles *d d*, and the combination of the whole with the drag and seat for the driver.

It is obvious that the edge *l* may be made in two pieces, as described, or of one piece turned over. Another advantage of this construction is this: in passing onto the piles of snow at the dump the lower edges of the handles *d d* and runners *f f* sink into the snow, and the edge *l*, forming an upward angle with the bottom of the scraper *c*, tends to ride over the snow, instead of cutting into it and thus overloading the scraper.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. In an ice-scraper, the edge *l*, of iron or steel, constructed double, the wood extending into the edge, the upper surface thereof being in a plane with the upper surface of the bottom of the scraper, the outer edge thereof beveled, and the under surface forming an angle with the under surface of the bottom of the scraper, and in a plane with the lower edges of the handles *d d*, and the runners *f f*, all operating as and for the purposes set forth.

2. The combination of a scraper having the edge *l* thereof constructed as fully set forth, and the runners *f f* and handles *d d*, as described, with the drag *j*, having seat *k* thereon, as specified.

LEVI HALLOWELL.

Witnesses:

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EDW. L. WHITEHOUSE.