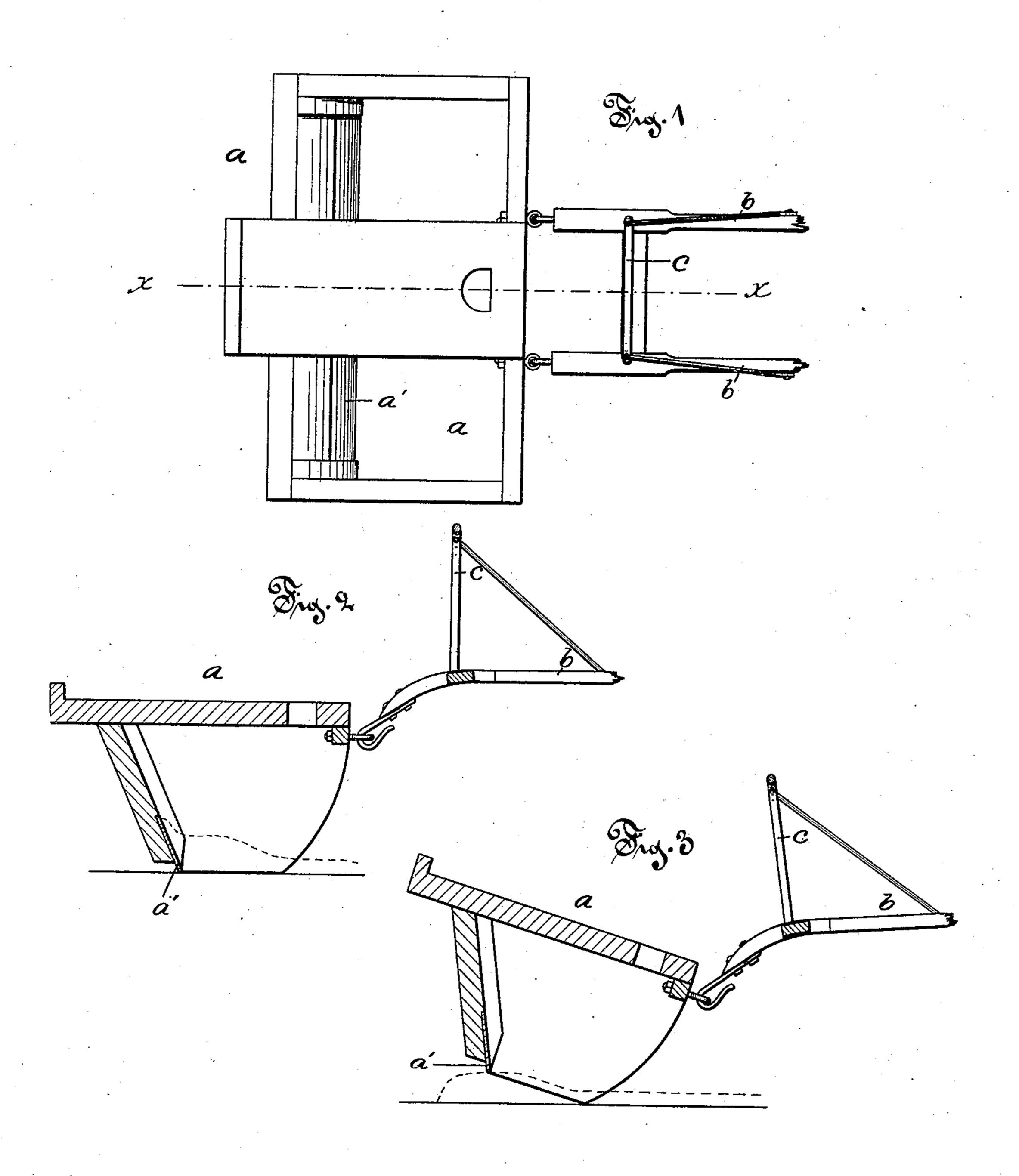
(No Model.)

## J. H. BOARDMAN.

SNOW SCRAPER.

No. 306,714.

Patented Oct. 21, 1884.



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attys.

## United States Patent Office.

JOSEPH H. BOARDMAN, OF EAST HARTFORD, CONNECTICUT.

## SNOW-SCRAPER.

SPECIFICATION forming part of Letters Patent No. 306,714, dated October 21, 1884.

Application filed September 5, 1883. (No model.)

To all whom it may concern:

Be it known that I, Joseph H. Boardman, of East Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Snow-Scrapers; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same

parts.

Figure 1 is a top view of my device. Fig. 2 is a view in vertical section of the same on the line x x of Fig. 1. Fig. 3 is a view in section on the same line, showing the scraper tilted up.

The apparatus described herein is intended 20 for removing snow from ice and other surfaces

by the aid of draft-animals.

The letter a denotes the scraper as a whole, being composed of a back board shod with a metal plate, a', for doing the scraping, and of two side boards, which serve as runners for the device to travel on. The front end of the scraper is curved or rounded—that is, the forward ends of said side boards are thus formed, so as to permit the scraper to rock forward on this rounded front, and thus raise the rear, so that the collected snow will be left in a "windrow," somewhat after the manner that a horse-rake deposits hay. The shafts b—or, when two

horses are used, a neap—are jointed to the front of the scraper, so that a horse may be 35 made available for drawing the scraper. The driver rides on the scraper, and when the scraper has collected a sufficient quantity of snow he bears with his weight upon the front of the scraper, which then tips or rocks forward, raising the rear and leaving the load of snow, after which the driver moves a little rearward and the rear part of the scraper again drops. From the shaft a guard, c, rises, against which the driver may rest his body in 45 the act of rocking the scraper, and thus prevent being pitched forward and off the scraper.

I claim as my invention—

1. In a snow-scraper, the combination of runners bearing a scraper-board rigidly secured transversely of the runners back of the rocking points, and means, substantially as described, whereby a weight applied to the top and front part of the device will tilt it upon said rocking points of the runners and the 55 draft-shaft pivoted to the scraper, all substantially as described.

2. In combination, the rocking scraper, the draft-shafts pivoted thereto, and the guard rising from the shafts, all substantially as de- 60

scribed, and for the purposes set forth.

## JOSEPH H. BOARDMAN.

Witnesses:

CHAS. L. BURDETT, EDWIN F. DIMOCK.