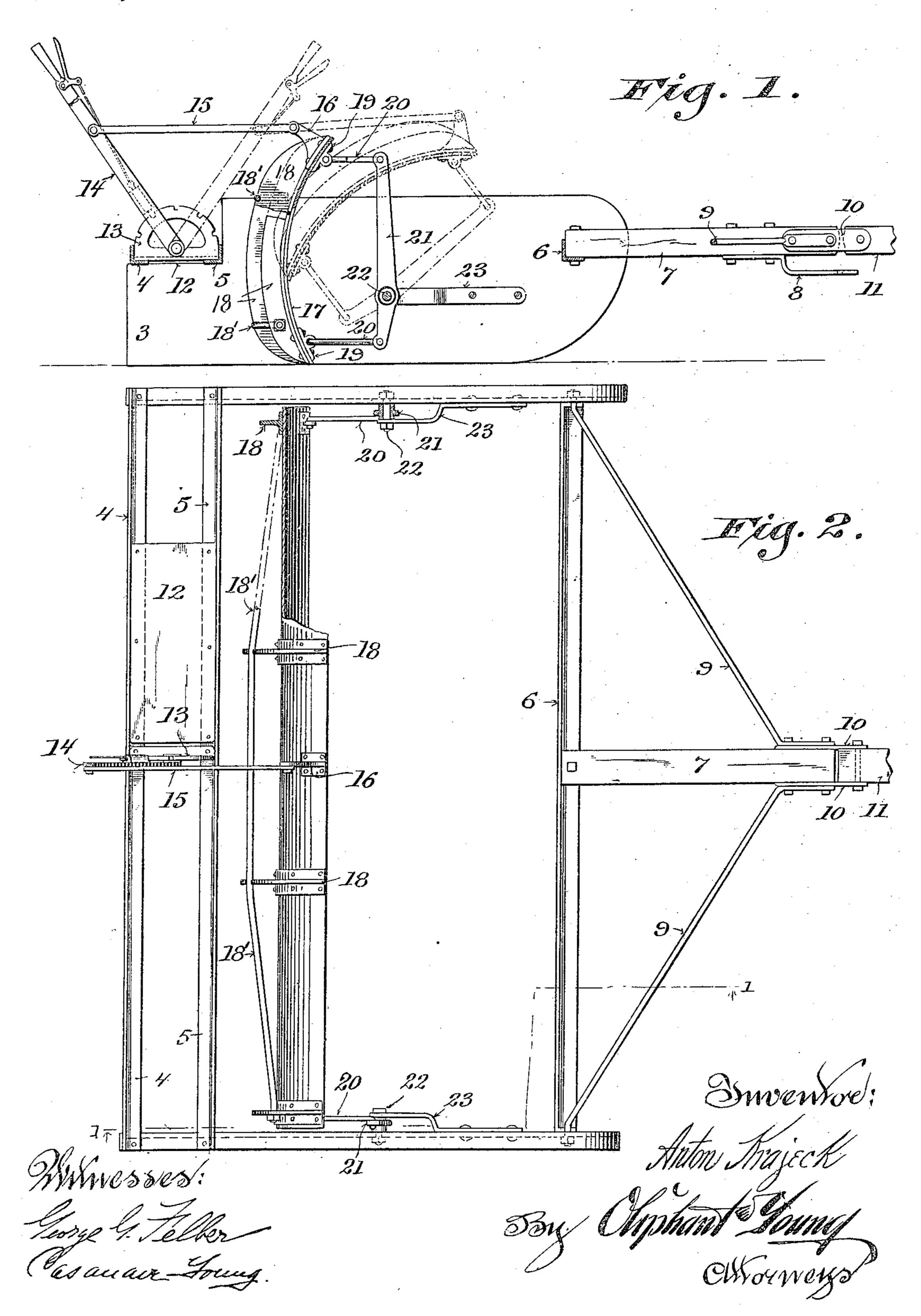
## A. KRAJECK. ICE FIELD SCRAPER.

APPLICATION FILED JUNE 30, 1909.

945,787.

Patented Jan. 11, 1910.



## UNITED STATES PATENT OFFICE.

ANTON KRAJECK, OF TWO RIVERS, WISCONSIN.

ICE-FIELD SCRAPER.

945,787.

Specification of Letters Patent.

Patented Jan. 11, 1910.

Application filed June 30, 1909. Serial No. 505,138.

To all whom it may concern:

Be it known that I, Anton Krajeck, a citizen of the United States, and resident of Two Rivers, in the county of Manitowoc and State of Wisconsin, have invented certain new and useful Improvements in Ice-Field Scrapers; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention consists in what is hereinafter particularly set forth with reference to
the accompanying drawings and pointed out
in claims, its object being to provide simple,
economical and efficient scrapers especially
designed for cleaning ice and snow from
ice fields preliminary to marking and cut-

ting the ice.

Figure 1, a transverse sectional view of the scraper on planes indicated by lines 1—1 in Fig. 2, the dumping position of the scoop portion of said scraper being shown by dotted lines in this view, and Fig. 2 of the drawings represents a plan view of an improved scraper in accordance with my invention partly in horizontal section.

Referring by numerals to the drawings, 3 indicates each of a pair of side-runners connected together by suitably arranged angle-iron brace-beams 4, 5, 6, bolted or otherwise rigidly secured thereto. Likewise connected to the forward beam 6 is a draft-beam 7 from which a double-tree hanger 8 is suspended and brace-rods 9 are also employed in connection with the runners 3 and said draft-beam. Interposed between forward

flattened ends of the brace-rods and the draft-beam are fish-plates 10 between which a draft-tongue 11 is pivotally secured.

The upper rear corners of the runners 3 40 are notched and the rear beams 4 and 5 are set in the notches. A platform 12 is fastened to the beams 4, 5, adjacent to a vertically disposed quadrant-bracket 13 that is also fastened to said beams and provided 45 with a series of radial notches. Fulcrumed in connection with the bracket, approximately midway between the runners aforesaid, is a hand-lever 14 provided with a latch for engagement with the notches of said 50 bracket, suitable latch-actuating means being employed in connection with the lever. A link-rod 15 connects the lever 14 with an upper rear arm 16 of a scoop 17 having rear angle-iron runner-ribs 18 at intervals of its 55 length engaged by truss-rods 18' bolted in place. The scoop is provided at its ends

with upper and lower clips 19, and links 20 connect the clips with ends of levers 21 fulcrumed on pivot-bolts 22 in connection with the runners 3 and brackets 23 fastened 60 thereto

thereto.

To scrape snow or slush from an ice-field, the scoop is set in the position shown by full lines in the drawings and pulled forward, the operator of the machine being sta- 55 tioned on the platform 12 aforesaid. Due to its weight, the scoop tends to plow into the snow or slush and move the same ahead so that it piles in said scoop. A section of the ice-field having been scraped, the lever 14 is 70 thrown forward causing the scoop to lift and ride over the pile of snow or slush previously caught ahead of same, after which it will swing down and rearward with the links 20 to so remain until again brought into work- 75 ing position by a throwing back of the lever 14, the angle of said scoop in working or non-working position being determined by the adjustment of said lever.

From the foregoing, it will be understood 80 that I provide an easily operated and efficient scraper for the purpose stated, and said scraper is of simple, economical, strong and

durable construction.

I claim:

1. An icefield scraper comprising beamconnected runners and draft-rigging, a suitably mounted hand-lever, a scoop in linkrod connection with said lever, other levers in fulcrum connection with said runners, 90 and links connecting the ends of these latter levers with the scoop.

2. An icefield scraper comprising beam-connected runners and draft-rigging, a beam-supported bracket, a hand-lever in fulcrum and latching connection with the bracket, a scoop in link-rod connection with said lever, other levers in fulcrum connection with said runners, and links connecting the ends of these latter levers with the scoop. 100

3. An icefield scraper comprising beamconnected runners and draft-rigging, a platform and bracket mounted in connection with rear beams of the structure, a hand lever in fulcrum and latching connection with the 105 bracket adjacent to the platform, a scoop in link-rod connection with said lever, other levers in fulcrum connection with said runners, and links connecting the ends of these latter levers with the scoop.

latter levers with the scoop.

4. An icefield scraper comprising a pair of runners, brace beams connecting the same,

a draft-beam connected to a forward bracebeam and provided with a double-tree hanger, means bracing the draft-beam, a draft-tongue in connection with said bracebeam, a scoop in link-and-lever connection with the runners, and a suitably mounted hand-lever in link-connection with the scoop.

5. An icefield scraper comprising a pair of beam-connected runners, brackets attached to the runners, pivot-bolts connecting said runners and brackets, levers fulcrumed on the bolts, a scoop, links connecting the ends of said levers and the scoop, and a suitably mounted hand-lever linked to said scoop.

6. An icefield scraper comprising a pair of 15 beam-connected runners and draft-rigging, a rear runner-ribbed and trussed scoop in link-and-lever connection with the runners, and a suitably mounted hand-lever linked to the scoop.

In testimony that I claim the foregoing I have hereunto set my hand at Two Rivers in the county of Manitowoc and State of Wisconsin in the presence of two witnesses.

ANTON KRAJECK.

Witnesses:

LAWRENCE W. LEDVINA, JOHN KRAJECK.