

J. JOHNSON.

Sled.

No. 72,401.

Patented Dec. 17, 1867.

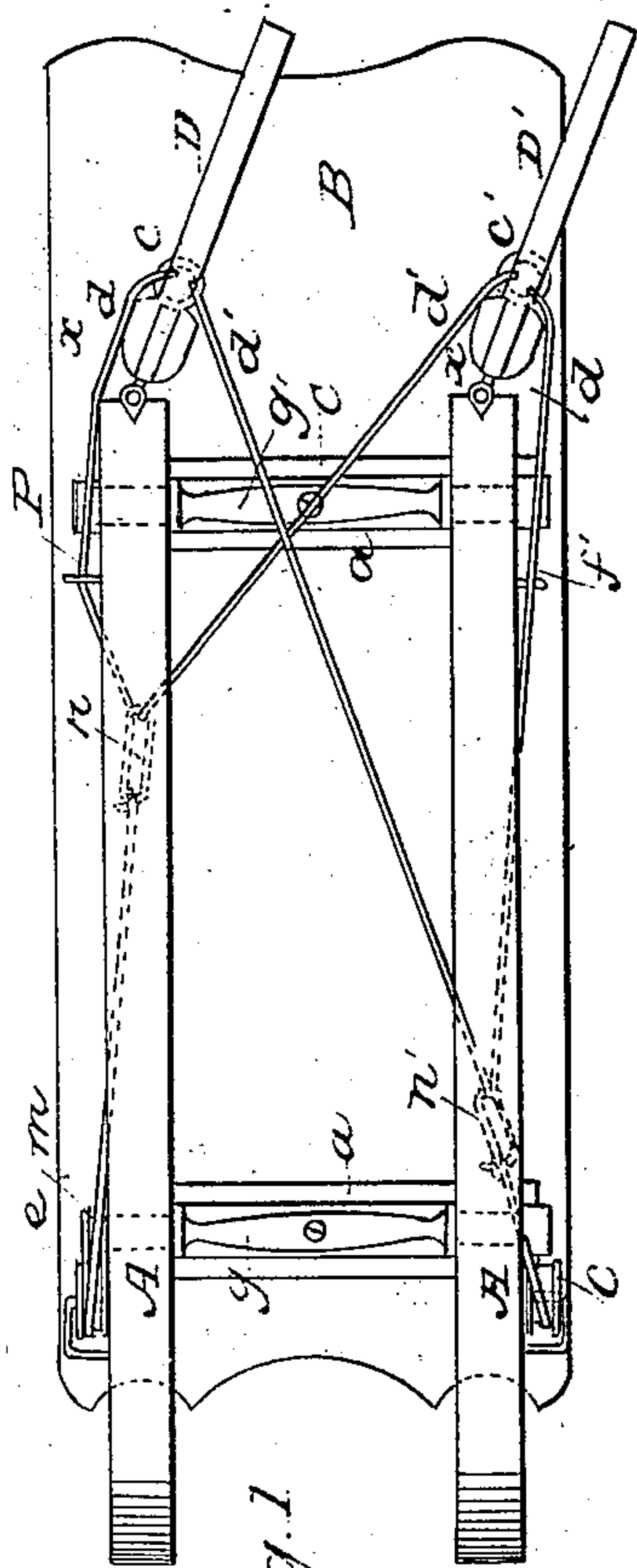


Fig. 1

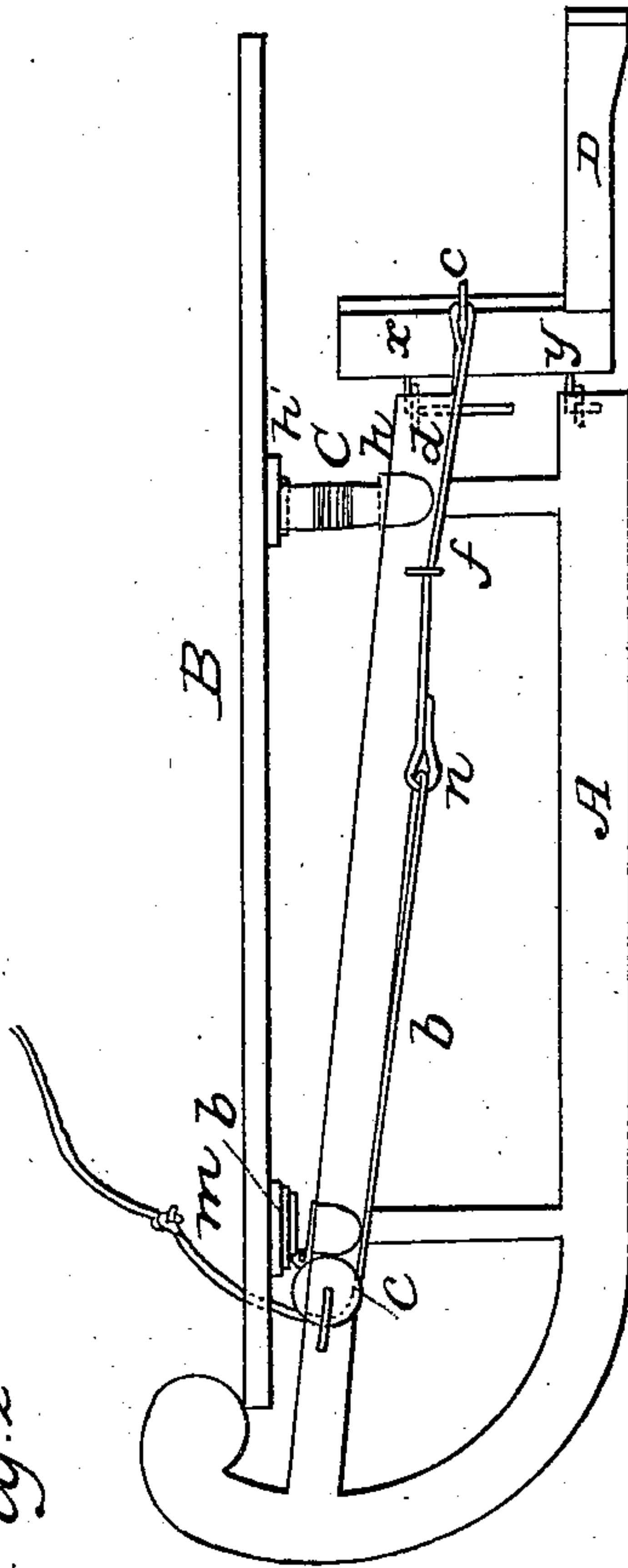


Fig. 2

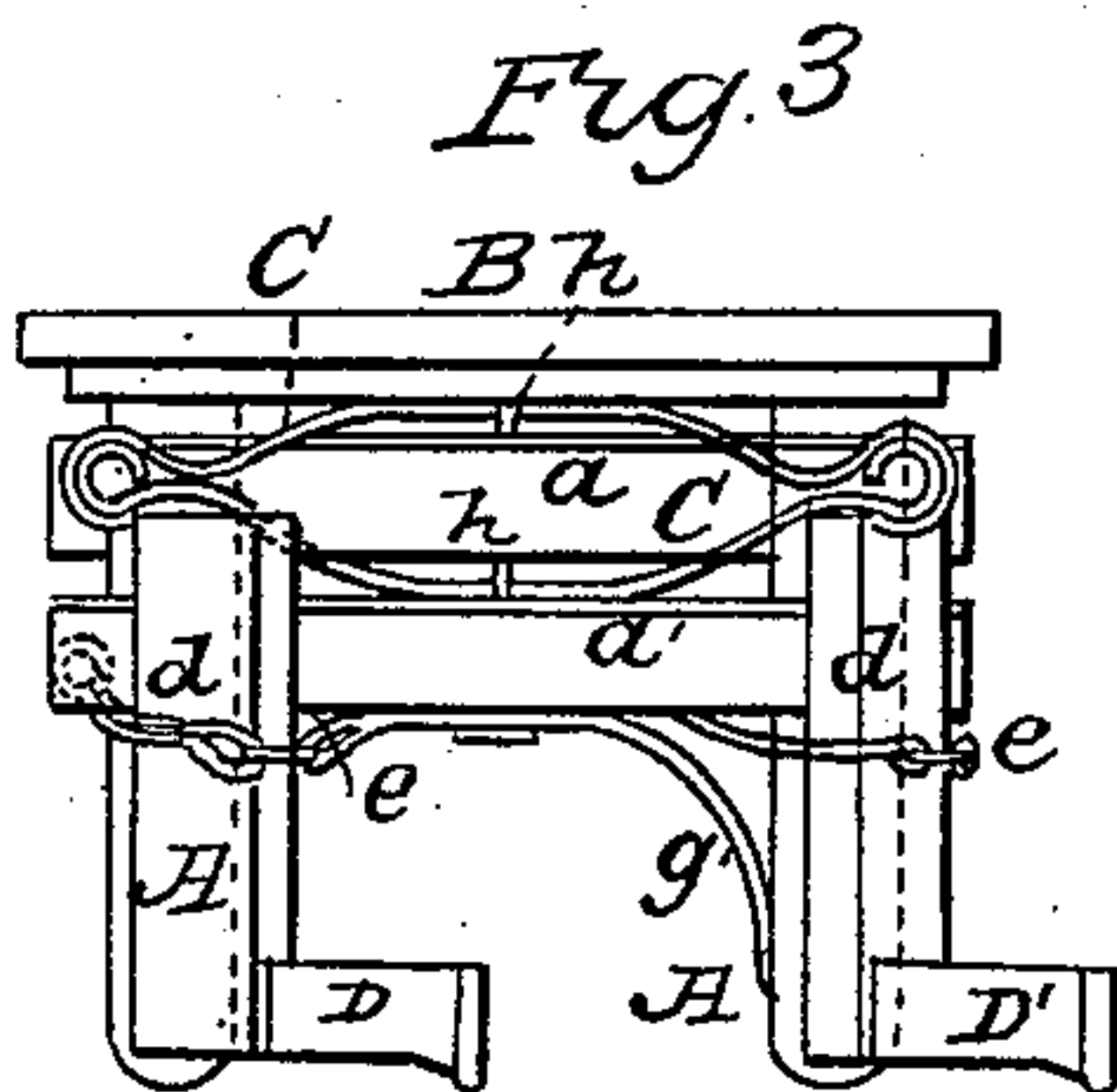


Fig. 3

Witnesses
Herbert Steyer
S. Edwin Linn

Inventor
John Johnson

United States Patent Office.

JOHN JOHNSON, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 72,401, dated December 17, 1867.

IMPROVEMENT IN SLEDS.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, JOHN JOHNSON, of Boston, in the county of Suffolk, and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Sleds used for coasting and purposes of sport and pastime; and I hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

The nature of my invention is, first, in providing a yielding or spring top to the sled, which, while it yields vertically, and so insures an easy and pleasant seat to the occupant, is, by my devices, prevented from a lateral or tilting motion which would render the seat uncomfortable and dangerous; and, secondly, a steering-device, by means of which the party seated on the sled can easily direct its course in coasting by means of a cord held in his hands without a change of position or any sacrifice of comfort and convenience.

The sleds in common use are made with the top or seat solidly fixed to the runners, and so without the means of lessening the effects of the roughness and inequalities of the course over which they pass, and are also devoid of steering-apparatus, the course being generally directed by the feet of the rider, an operation inconvenient and dangerous, and resulting in the increased wear and tear of his boots or shoes.

To enable others skilled in the art to make and use my invention, I will further describe its construction and operation. In the accompanying drawings—

Figure 1 represents a bottom view of a sled with my improvements.

Figure 2 a side view, and

Figure 3 an end view of the same.

A and A' are the runners of the sled; B is the top or seat; *a* and *a'* the cross-bars connecting the runners; C the spring on which the seat rests; *b* and *b'* are the hinges by which the seat is secured to the front cross-bar. D and D' are the rudders, which, with the cords *d* and *d'*, the hand-cord *m*, and the pulleys *c* and *c'*, constitute the steering-apparatus. *e* and *e'* are the staples or eyes by which the cords are made fast to the rudders, and *f* and *f'* the eyes through which they pass on the sides of the runners. *g* and *g'* are the braces or supports serving to further strengthen the sled.

My mode of constructing my improved sled is this: The runners A and A' are firmly connected by the cross-bars *a* and *a'*, and further strengthened, if required, by the braces *g* and *g'*. The top or seat B is then attached to the front cross-bar *a* by means of the hinges *b* and *b'*, or some similar device, by which the seat is firmly secured and any lateral or rocking motion prevented, and at the same time sufficient play allowed for the action of the spring C, which is secured to the rear cross-bar by the staple *h*, and to the top or seat by the staple *h'*. By this device the seat is rendered comfortable, while it is as secure from tipping or rocking as if directly fastened to the runners.

My steering-device consists of the rudders D and D', which are made either of wood or metal, or of wood shod with metal, in the form represented in the drawings, and attached to the rear of the runners by the hinges *x* and *y*, so constructed as to allow the rudders to move up and down to meet the inequalities of the surface over which the sled is passing, while their own weight tends to keep them upon such surface with sufficient force to accomplish the intended object. To the eyes or staples *e* and *e'* are attached the tiller-cords *d* and *d'*, each one made fast to the outer side of the opposite rudders, and passing along on the sides of the runners through the eyes *f* and *f'*, and then, through the loops *n* and *n'* of the hand-cord, across under the seat B to the inner side of the opposite rudders, where they are again made fast. The hand-cord *m* passes down through holes from the top of the sled under the pulleys *c* and *c'*, and ends in the loops *n* and *n'*, through which the cords *d* and *d'* pass. These cords combined operate substantially like a pair of driving-reins for a span of horses. The rider on the sled, by means of the hand-cord *m*, pulling which side he desires, pulls directly upon the outer side of one rudder and the inner side of the opposite one, and so moves them simultaneously and in the same degree and direction.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A sled, in which the top or seat B is secured, at or near its forward end, to the front cross-bar by hinges *b* and *b'*, while its rear end is supported by means of a spring, *c*, when such is combined with a steering-apparatus, as described, the whole being constructed, arranged, and operated in the manner and for the purposes set forth.

JOHN JOHNSON.

Witnesses:

A. B. COFFIN,
S. E. IVESON.