J. LEE.

HAND-SLED.

No. 183,576. Patented Oct. 24, 1876.

Fig. 1

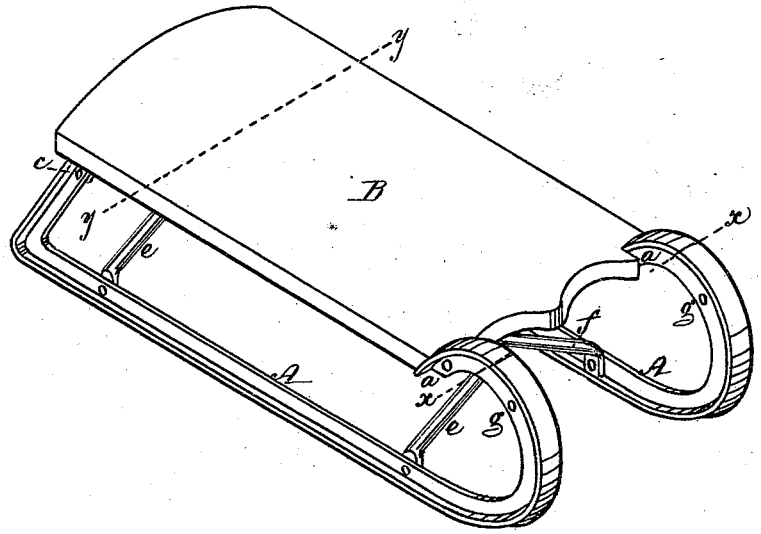


Fig. 2

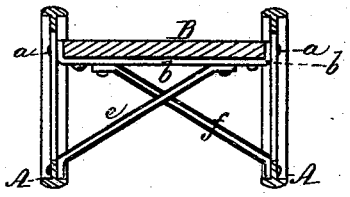
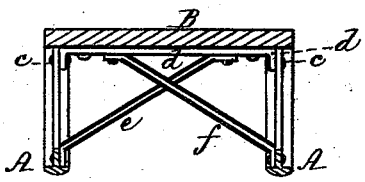


Fig. 3



Witnesses;
W. J. Cambridge
J. E. Cambridge

Inventor,
John Lee
per Deschemacher & Stearns
Attys

UNITED STATES PATENT OFFICE.

JOHN LEE, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN HAND-SLEDS.

Specification forming part of Letters Patent No. **183,576**, dated October 24, 1876; application filed August 24, 1876.

To all whom it may concern:

Be it known that I, JOHN LEE, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Sleds, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of a coasting-sled constructed in accordance with my invention. Fig. 2 is a transverse vertical section on the line *x x* of Fig. 1. Fig. 3 is a transverse vertical section on the line *y y* of Fig. 1.

This invention has for its object to produce a coasting-sled possessing lightness combined with great strength, the runners to be entirely of metal, exposing a broad bearing-surface, and yet not materially increasing the weight; and consists in a sled provided with runners composed of T-shaped iron bent into the required form, and held together by suitable braces, by which construction the desired stiffness, lightness, and strength are secured.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A A represent the runners, each of which is composed of a single bar or piece of iron or steel of T form in cross-section, bent into the desired shape. The outer surface of the runner is curved or rounded in cross-section, as seen in Figs. 2 and 3; but it may be flat, if desired.

The runners are bowed or turned up in front, and to each of the ends *a a* is riveted the turned-up end of a horizontal iron bar or brace, *b*, while to the rear extremities *c c* of the runners are riveted the turned-down ends of another horizontal iron bar or brace, *d*, these bars *b d* serving to unite the runners A A, and forming a bed or support for the seat-board B, which is secured thereto by screws, or otherwise. To the under side of each of the bars *b d* are riveted two angle-braces, *e f*, formed of stout iron rods, these braces crossing each other, and being riveted at their lower ends to the inner sides of the runners A A, as shown, the runners being thus held immovably together, and the ordinary upright supports between the runners and the seat (which are liable to break) being dispensed with.

The arrangement of the braces may be varied, if desired, and the runners may be bent into any desired shape. At the front of the runners are apertures *g g*, for the reception of the cord by which the sled is drawn.

It will be seen that the T form of the iron renders it extremely light, and, at the same time, capable of resisting a great strain, gives a broad metallic bearing-surface on the snow without any material increase of weight over the metallic-shod wooden runner now generally used, and, consequently, a sled constructed as above described is particularly adapted for children's use, there being no liability of its being bent or broken by any hard usage to which it may be subjected.

I am aware that T-iron has heretofore been used for a variety of purposes.

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

As an improved article of manufacture, a sled having runners made of T-iron, properly attached and braced, so as to make the broad surface of the T-iron the bearing-surfaces, substantially as set forth.

Witness my hand this 17th day of August, A. D. 1876.

JOHN LEE.

In presence of—
P. E. TESCHEMACHER,
W. J. CAMBRIDGE.