

S. GILZINGER.
BOY'S SLED.

No. 188,353.

Patented March 13, 1877.

Fig: 1.

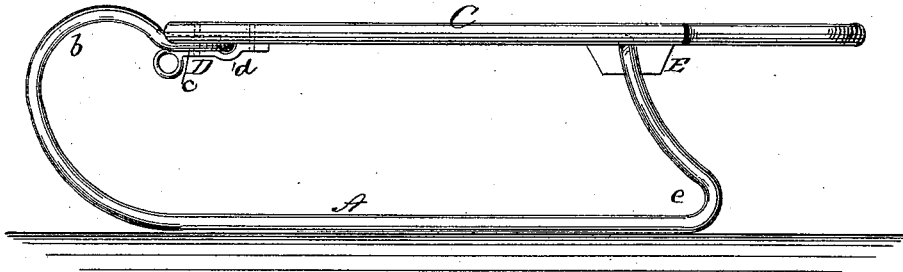


Fig: 2.

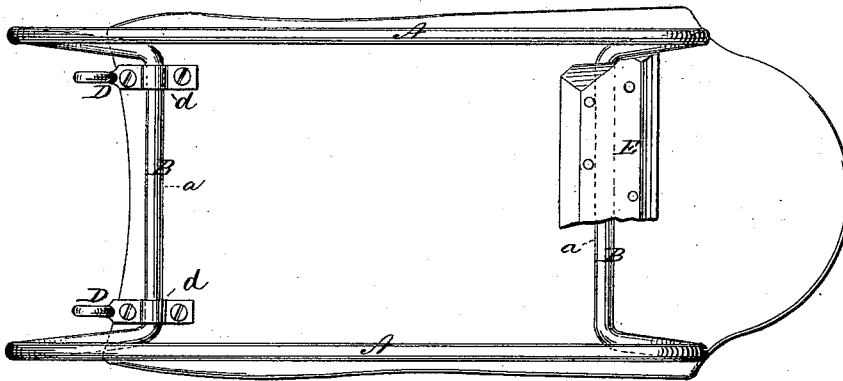
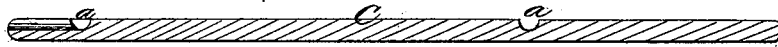


Fig: 3.



Witnesses:

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Inventor:

Sebastian Gilzinger
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UNITED STATES PATENT OFFICE.

SEBASTIAN GILZINGER, OF RONDOUT, NEW YORK, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO ABEL A. CROSBY, OF SAME PLACE.

IMPROVEMENT IN BOYS' SLEDS.

Specification forming part of Letters Patent No. 188,353, dated March 13, 1877; application filed June 20, 1876.

To all whom it may concern:

Be it known that I, SEBASTIAN GILZINGER, of Rondout, in the county of Ulster and State of New York, have invented a new and useful Improvement in Sleds; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making part of this specification.

This invention is in the nature of an improvement in sleds; and the invention consists in a sled, the two runners and cross-braces being constructed from one continuous piece of metal, the under side of the body-board having recesses formed therein, within which are received the cross-ties of the sled, combined with the tugs, and with clips, staples, or a cleat, substantially as hereinafter shown and described.

In the accompanying sheet of drawings, Figure 1 is a side view of my sled; Fig. 2, an under side view of same, and Fig. 3 a longitudinal section of body-board.

Similar letters of reference indicate like parts in the several figures.

A A represent the runners of a sled, formed of steel or iron, and so constructed that these runners and the cross braces or ties B are made from one continuous piece of metal.

The body-board C is constructed on its under side with grooves or recesses *a* of such size as will enable the cross-braces B to be received within the grooves or recesses, by which means they are confined to the body-board, principally with the aid of the tugs D, the rear of which form clips *d*, which inclose the front cross-brace B, so that when the tugs are screwed to the under side of the body-board they materially assist in confining the board to the front cross-brace. The rear brace may be secured in like manner by clips or staples, or by a cleat, E.

The runners should be so curved that the seat or board may be, to a certain extent, springy, and to accomplish this in such manner as not to impair the strength of the run-

ners, it is necessary that such runners should be curved or bent in a peculiar manner, as follows: Forward of the sled the runners are brought upward and bent on a curve nearly circular, as at *b*, this curve projecting slightly above the seat, and the said runners are continued backward (about parallel with the bottom or runners proper) at *c*, forming a flat or level surface for the seat to rest upon. The rear portion or heel of the runners at *e* is also bent or curved very gradually so as to permit the standard or knee to rise at an easy angle. The seat is thus hung upon springs, the weight upon which is evenly distributed, and the full strength of the metal left unimpaired, which would not be the case were the bends in the runners at the heel and toe made very abruptly, as has been the construction heretofore. Where these heel and toe bends have been made abruptly, the standards or knees rise therefrom at such an angle as to concentrate the weight on the sled directly on these bends, which are the weakest points.

The parts *c*, as well as the braces in my sled, are received in the grooves in the under face of the seat, serving to unite the runners and seat in a very firm manner, and to stiffen the iron-work.

I am aware that the runners and cross-ties of sleds have been made of a single continuous piece of metal, and I do not claim this broadly as my invention; but

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

The combination of the runners and braces A B, formed of a single continuous piece of metal, curved in the manner specified, the combined tugs D and clips *d*, and clips, staples, or a cleat, E, with the seat C and grooves *a*, constructed substantially as shown and described.

SEBASTIAN GILZINGER.

Witnesses:

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