

(No Model.)

J. W. RUSSELL.

SLED.

No. 264,769.

Patented Sept. 19, 1882.

Fig. 1.

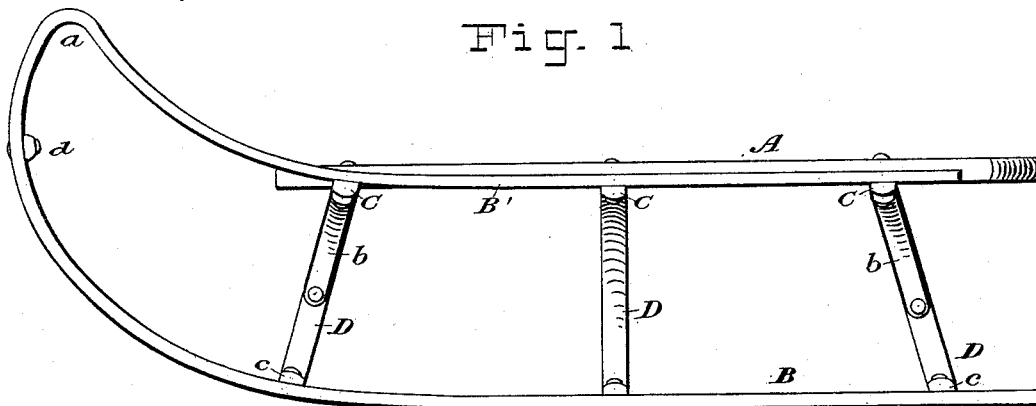


Fig. 2.

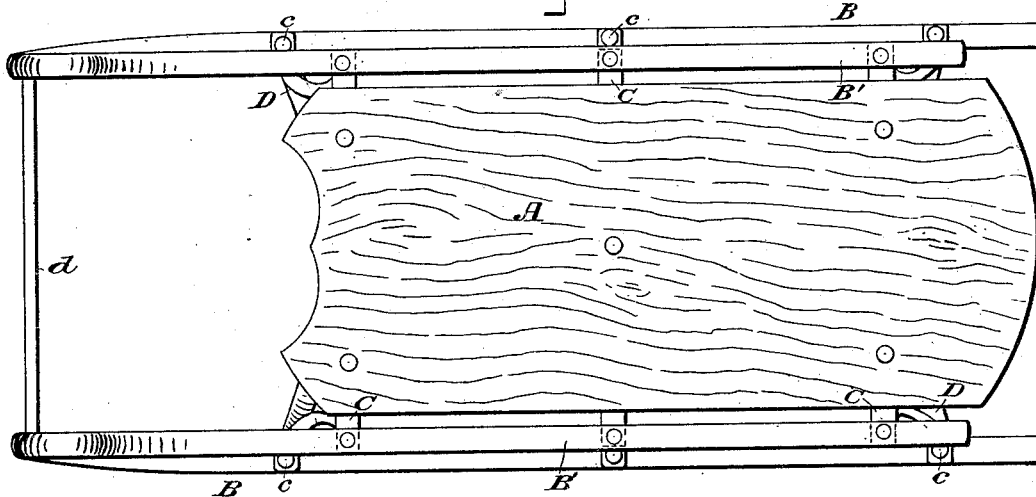
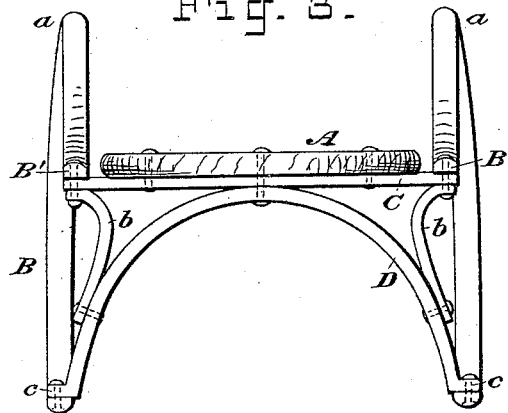


Fig. 3.



WITNESSES:

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SLED.

SPECIFICATION forming part of Letters Patent No. 264,769, dated September 19, 1882.

Application filed April 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. RUSSELL, of Ellenville, in the county of Ulster and State of New York, have invented certain Improvements in Sleds, of which the following is a specification.

My invention seeks to produce a strong and well-braced boy's sled at a moderate cost.

In the accompanying drawings, Figure 1 is a side elevation, Fig. 2 is a plan, and Fig. 3 is a rear elevation, of my improved sled.

Let A designate the board or seat, and B B the two runners. I make the seat of wood by preference, and the runners and all the other parts of half-round steel bar.

To the under side of the board A are fastened three cross-bars, C C, the ends of which extend slightly beyond the sides of the board.

D D are three arches or arched braces, each of which is fastened at its extremities to the two runners B B and at its crown to one of the cross-bars C, as shown in Fig. 3. These form rigid lateral braces, serving to transmit the weight from the board to the runners and to keep the latter from spreading apart. The middle arch D stands in a vertical plane and the front and back ones in planes inclined, as shown in Fig. 1, to afford a longitudinal bracing.

The runners B B terminate at the back, as usual, and extend thence forward and curve upwardly in front of the board in the usual form. At *a* they are bent back in a somewhat sharp curve, and are carried thence backward along the side edges of the board to near the rear end thereof, being fastened to the projecting ends of each of the cross-bars C C, and forming the raves B' B'. Thus I make the runner and rave on each side of one piece, by which I acquire great strength and stability, as well as simplicity of construction.

To further stiffen the arches D and support the cross-bars C C, I provide the front and back arches with corner pieces or braces, *b b*, one on each side, and each fastened at one end to the end of the bar C and at its other end to the side of the arch D, as best shown in Fig. 3. The middle arch may be also thus braced, if deemed necessary.

Although I have shown three bars C C and arches D D, this number is by no means essential, as on smaller or lighter sleds the inner one may be omitted, and on larger sleds one or more additional bars and arches may be added.

I make no claim to bars C C, arches D D, or corner-braces *b b* in themselves, as I know these parts to be old. The arches D as heretofore made have been of wood in two pieces or quarter-circles meeting at the crown or center, and there attached to a wooden cross-bar, C. I form the arch D of metal of one continuous piece, bend its ends outwardly to form feet *c*, Fig. 3, to rest on the runners, and rivet through these feet and the runners. In this way I make a brace possessing greater elasticity and stiffness than the two-part wooden arch, or any wooden arch, and at a less cost.

All the parts of my sled are preferably connected by rivets, as indicated.

I claim as my invention—

1. A sled constructed with runners and raves B B', cross-bars C C, and arch-braces D D, formed of metal, the said arch-braces being stepped by flanges upon the runners and secured thereto by rivets or their equivalent, and the front and back arch-braces being inclined in opposite directions, thereby dispensing with both standards and braces between the runners and raves, substantially as and for the purpose herein specified.

2. The combination, to form a sled, of the board A, the runners and raves B B', of continuous metallic strips, metallic cross-bars C C, metallic arch-braces D D, provided with corner-braces *b b*, and stepped upon the runners by flanges secured by rivets or their equivalent, dispensing with both standards and braces between the runners and raves, all substantially as and for the purpose herein specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JAMES W. RUSSELL.

Witnesses:

ARTHUR C. FRASER,
BEN. C. RUSSELL.