(No Model.)

A. S. RUSSELL.

SLED.

No. 255,197. Patented Mar. 21, 1882.

Fig. 1.

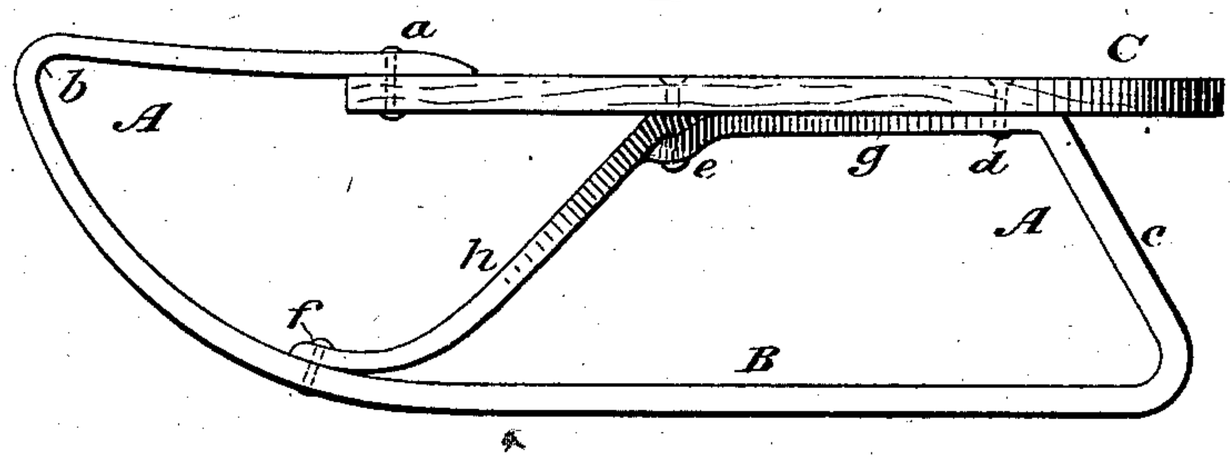


Fig. 2.

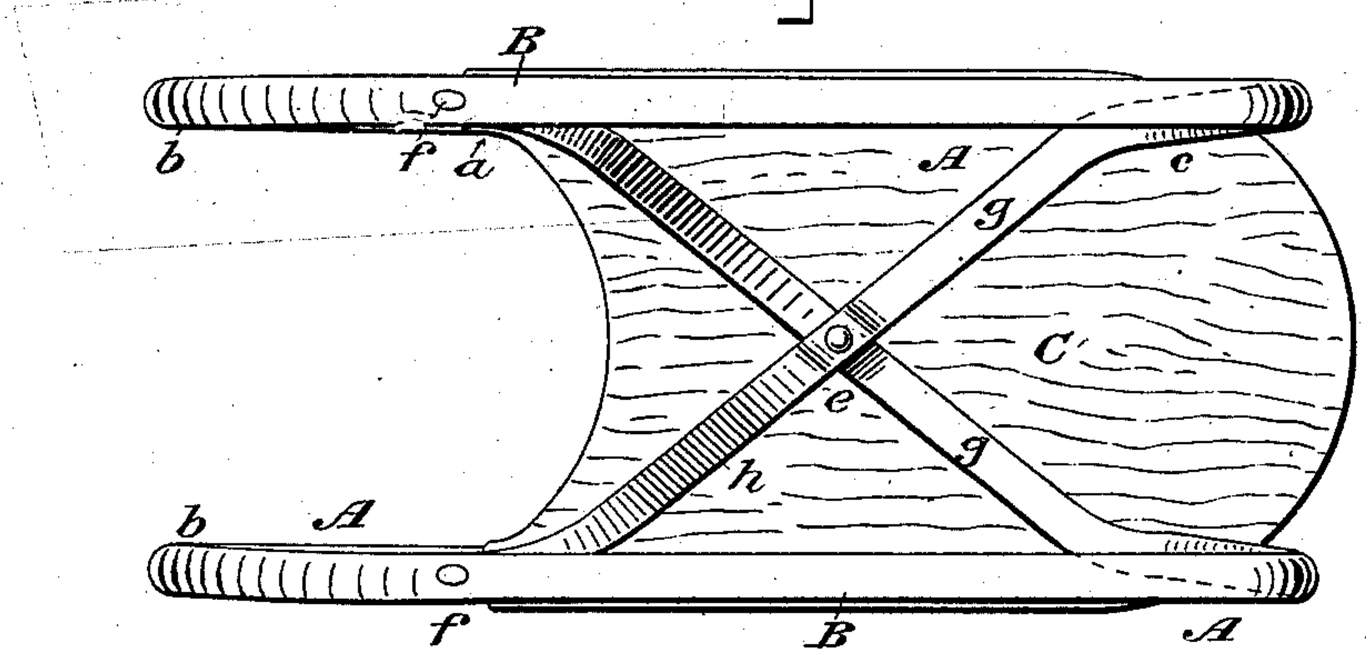
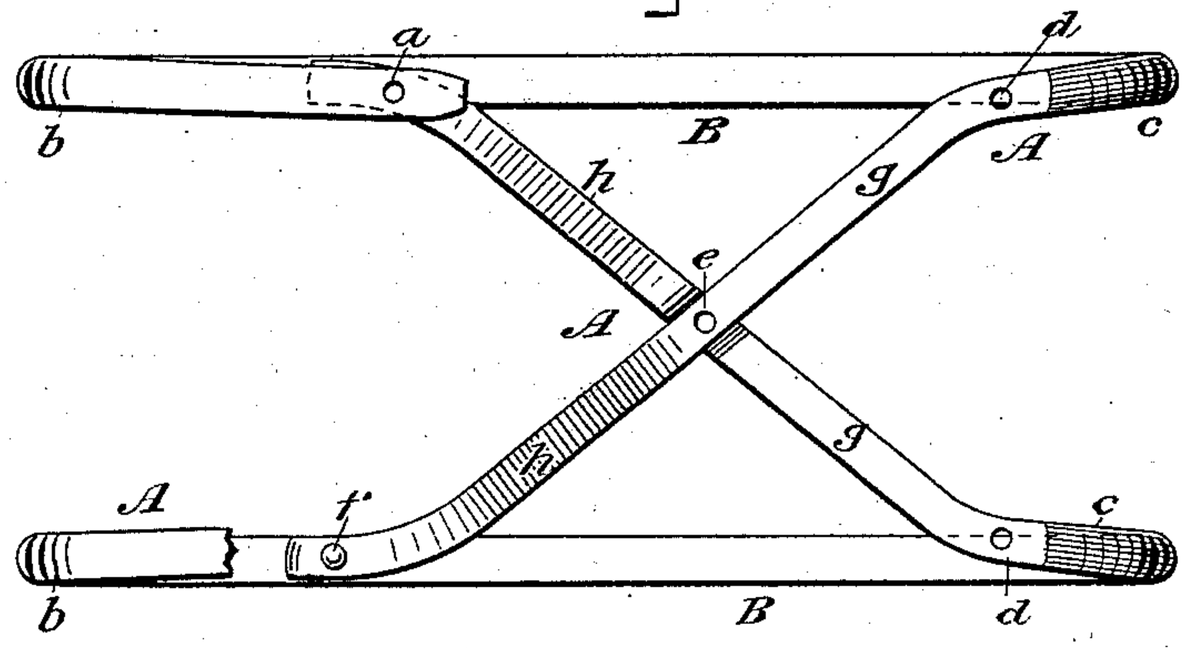


Fig. 3.



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UNITED STATES PATENT OFFICE.

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SLED.

SPECIFICATION forming part of Letters Patent No. 255,197, dated March 21, 1882.

Application filed January 19, 1882. (No model.)

To all whom it may concern:

Be it known that I, ASA S. RUSSELL, a citizen of the United States, residing at Ellenville, in the county of Ulster and State of New York, have invented an Improved Sled, of which the following is a specification.

The object of my invention is to strengthen and stiffen the frame of a sled or sleigh and relieve the wooden board or seat of nearly all strain.

Figure 1 of the accompanying drawings shows my sled in side elevation, and Fig. 2 an inverted plan, while Fig. 3 is a plan of the iron frame with the board or seat removed.

A is the frame, comprising the runners B B, and C is the board or seat. The frame A is constructed of two bars of iron, each forming one runner. Each bar is attached to the front of the board at *a*, extends thence forward to *b*, is bent thence downward in a curve, and passes back beneath the sled, forming thereby the runner B. At the back of the sled it is bent and extends upward, preferably at an angle, as shown at *c*, to the board C, to which it is fastened at *d*. It extends thence underneath the board diagonally across the same until it meets and crosses the other bar at *e*, where the two are fastened together and to the board; and it extends thence diagonally forward, downward, and outward to the opposite runner, on which its end rests at *f*, and to which it is fixed by bolting or otherwise. The diagonal portions of the two bars, between the points *d d* and their intersection at *e*, are lettered *g g*, and their diagonal inclined portions, extending from *e* to their ends at *f f*, are lettered *h h*. The two diagonal portions *h h* serve to resist the upward strain on the runners in coasting caused by striking hillocks and jolting over irregular places, and also to hold the runners at the points *f f* at the proper distance apart and resist any lateral strain tending to bend either toward the other. The two diagonal portions *g g* serve as an extended rest for the support of the board C and act to cross-brace the frame and connect the two runners together, thereby relieving the board C of all lateral strain tending to split it and of nearly all strain in other directions.

Prior to my invention the runners have terminated at *d d* and a separate V-shaped brace has been employed in place of my diagonal portions *h h*, its ends being jointed to the runners and its bend being fastened to the board. In such construction the only connection between the bend of the brace and the rear ends of the runners is through the medium of the board, to which both are attached, which tends to split the board and to rack the entire sled and loosen the connections of the several parts, especially at the fastenings *d d*, where the runners terminate. These defects are avoided in my construction, the result being that my sled will endure much harder usage and will wear longer without breaking or becoming deteriorated than those heretofore devised.

The frame A might be constructed of one bar of iron instead two by establishing a cross-connection between the points *a a*, this portion being the middle of the bar before bending.

I claim as my invention—

1. A sled consisting of the combination of the board C with a frame, A, the latter consisting of a bar or bars bent to form runners B B, and having diagonal portions *g g*, extending close beneath the board, meeting each other, and inclined diagonal portions *h h*, extending from the point of intersection forward, outward, and downward to the runners, terminating thereon and fixed thereto, whereby a diagonal brace is formed to stiffen the runners, substantially as and in the manner set forth.

2. A sled consisting of the combination of a board, C, and two runners, B B, attached to the board at its opposite ends, and each runner prolonged beyond its rear point of attachment, extending thence diagonally close beneath the board, crossing the prolongation of the other runner, and descending thence diagonally forward and outward to the opposite runner, terminating thereon and fixed thereto, substantially as and for the purposes set forth.

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

ASA S. RUSSELL.

Witnesses:
JOHN L. COX,
CALVIN DU BOIS.