

(No Model.)

R. W. WALKER.
SLEIGH.

No. 528,831.

Patented Nov. 6, 1894.

Fig. 1.

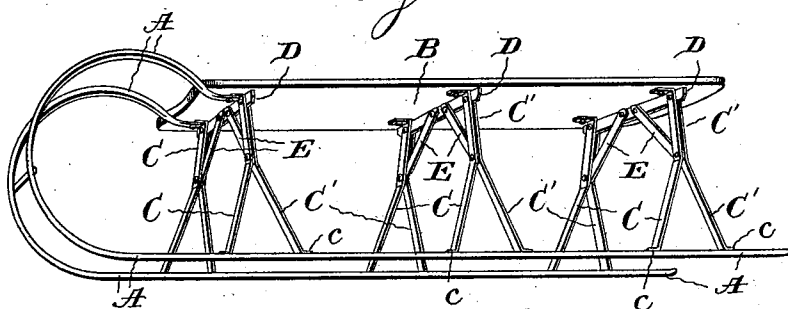
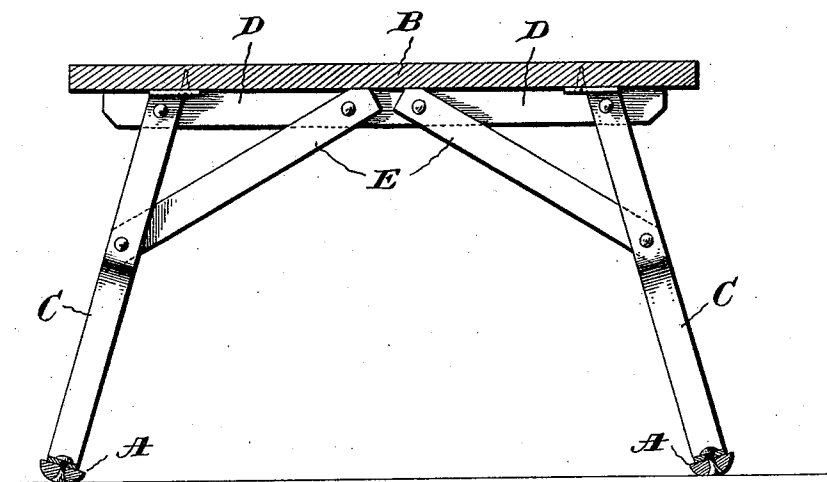


Fig. 2.



Witnesses:

Jas. E. Hutchinson.
Henry C. Hazard.

Inventor.

Randall H. Walker, by
Kindle^d Russell, his Attys

UNITED STATES PATENT OFFICE.

RANDALL W. WALKER, OF OXFORD, NEW YORK, ASSIGNOR TO FRED. P. BROOKS, OF SAME PLACE.

SLEIGH.

SPECIFICATION forming part of Letters Patent No. 528,831, dated November 6, 1894.

Application filed July 30, 1894. Serial No. 518,952. (No model.)

To all whom it may concern:

Be it known that I, RANDALL W. WALKER, of Oxford, in the county of Chenango, and in the State of New York, have invented certain new and useful Improvements in Sleds or Sleighs; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a sled constructed in accordance with my invention, and Fig. 2 a cross section thereof on a larger scale.

Letters of like name and kind refer to like parts in each of the figures.

The object of my invention is to improve the construction of sleds, cutters, &c., so that the same will be extremely strong and durable, light in weight, and easy and cheap of manufacture, and to this end, said invention consists in a sled or sleigh, having the features of construction, substantially as and for the purpose hereinafter specified.

In the drawings I illustrate the application of my invention to a sled, and in constructing the same, I employ runners A and A which are made from metal, preferably, and have their front portions bowed or curved in the arc of a circle upward and then downward, and the ends thereof passed under and screwed, or otherwise fastened to the front end of the seat or platform B. Said seat is supported from the runners by several knees or supports, each of which is constructed as follows, viz: Attached to and rising from corresponding points upon each runner, are two thin flat bars C and C', that converge to about their mid-length and then run parallel with each other with a narrow space between them. The lower end of each bar is bent horizontally outward to form a foot c which is riveted to the runner and the upper end of the bar C only, is bent horizontally and is attached to the seat by means of a bolt or screw. Running across from one pair of bars C and C' to the pair directly opposite, is a narrow, flat, bar D which has each end passed between and riveted to the upper ends of a pair of said bars C and C'. Said bar D is placed edgewise with its upper edge abutting against the under side of the seat B to directly

support the same, and thus placed obviously affords the greatest possible strength for withstanding vertical strains, although laterally it is quite thin.

Just above the point where the bars C and C' of each knee converge, a thin, flat, bar E has its end passed between and riveted to the parallel parts thereof, and from thence extends obliquely inward and upward, and has its upper end riveted to the side of the bar D.

It will be seen that by the construction employed, the bars D and E require no bending, such as is done at the ends of the bar C, for their attachment to their appropriate parts, and that a single rivet serves in each instance both to unite the parallel portions of the bars C and C', and each bar D and E to the same. All of this contributes to the diminution of the cost of manufacture and the weight of the structure, but without any loss of strength. In appearance the sled is neat and graceful.

As hereinbefore indicated, the invention is applicable to other conveyances mounted upon runners, besides sleds, such as cutters, bob-sleds, &c., and that without change in the construction, other than in respect to the size and proportion of parts, and the substitution of a suitable framing for the seat or platform B of the sled.

The runners A and A are made of metal to avoid the necessity for shoes, although, of course, the use of wood will involve no departure from my invention.

Having thus described my invention, what I claim is—

1. As an improvement in sleds, sleighs, &c., the combination with the runners and the part to be carried thereby, of a support consisting of two bars rising from corresponding points upon the runners, a transverse bar extending from the bars upon one runner to those upon the other and having each of its ends placed edgewise between and fastened to each pair of said bars; and a brace bar attached to and extending from the transverse bar to each of said pairs of bars and having its end suitably fastened to them, substantially as and for the purpose specified.
2. As an improvement in sleds, sleighs, &c., the combination with the runners and the

seat or platform, of a support consisting of
two bars that are attached at their lower ends
to each runner and converge therefrom and
then extend parallel with each other, and one
5 of which is bent horizontally for its attach-
ment to the seat or platform, a transverse
bar engaging the under side of the latter and
extending across from one pair of bars to the
other and having each end passed edgewise
10 between and riveted to the same, and a brace
bar riveted at one end to said transverse bar

and having its other end passed between and
riveted to one set of such pairs of bars, sub-
stantially as and for the purpose shown.

In testimony that I claim the foregoing I 15
have hereunto set my hand this 27th day of
June, 1894.

RANDALL W. WALKER.

Witnesses:

HERBERT J. SAUNDERS,
FRED. P. BROOKS.