S. E. FOSTER.

Sleds.

No. 158,481. Patented Jan. 5, 1875.

FIG. I.

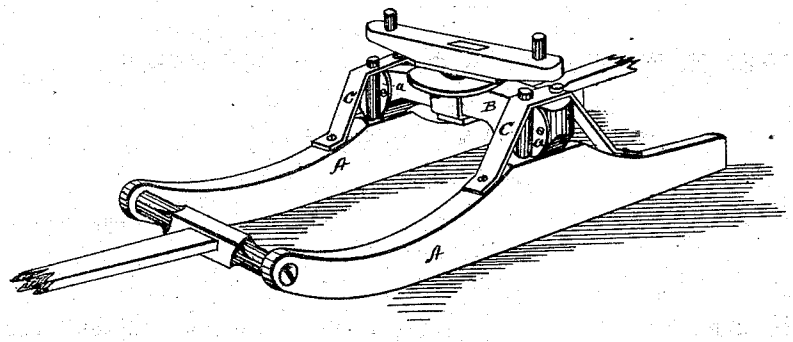
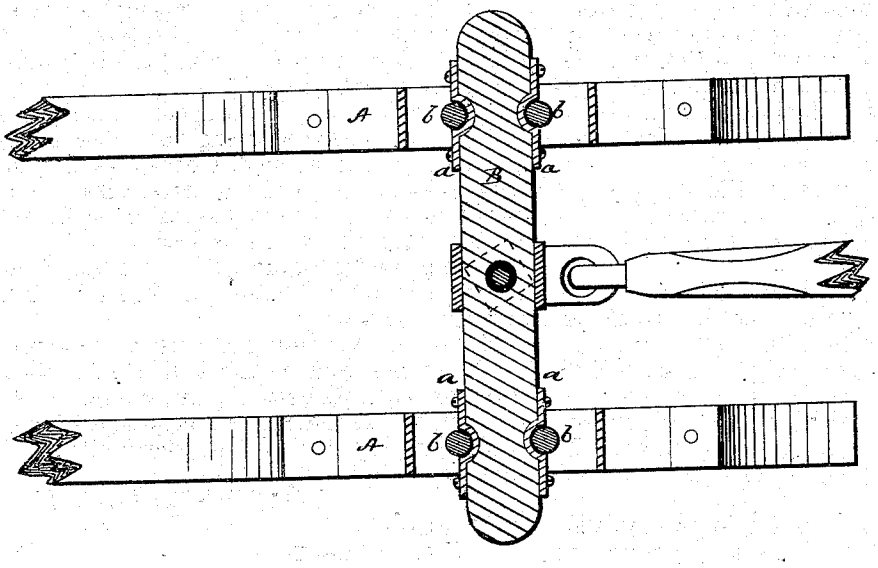


FIG. II.



WITNESSES.

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STEPHEN E. FOSTER, OF MINNEAPOLIS, MINNESOTA.

IMPROVEMENT IN SLEDS.

Specification forming part of Letters Patent No. **158,481**, dated January 5, 1875; application filed December 5, 1874.

To all whom it may concern:

Be it known that I, STEPHEN E. FOSTER, of Minneapolis, Minnesota, have invented a new and useful Improvement in Sleds, of which the following is a clear, full, and exact description, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a perspective view of the front portion of a sled with my improvement attached. Fig. 2 is a horizontal section of same.

My invention relates to every description of sleds; and consists in devices for strengthening the cross-beams at the point at which they are attached to the runners.

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

In the drawings, A A represent the runners of a sled, and B the cross-beam by which the runners are secured together.

This cross-beam has usually been secured to the runners by means of bolts passing through each end. This necessarily weakened the very points on which was the greatest strain. To overcome this difficulty is the object of my invention.

To the sides of the cross-beam, at each end, I fit the strong metal plates *a a*, grooved, as shown in Fig. 2, the grooves fitting into corresponding grooves made in the cross-beam, and of sufficient size to encircle one-half of the bolts *b b*, which pass through the bent bar C. The bar C is a strong metal bar, bent across the cross-beam B, and secured to the runner by screws or other suitable means at each end, as shown in Fig. 1.

I am aware that bolts have been inserted on each side of the cross-beam; but my improvement consists in fitting in the plates *a* with semicircular centers, for holding the bolts and strengthening the cross-beam.

It is evident from the foregoing description that my device for securing the cross-beam to a sled strengthens instead of weakening the beam at the point of the greatest strain, and furnishes a ready means of securing or removing the beam, as may be desired.

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

The plates *a a*, provided with a semicircular depression and bolts *b b*, in combination with bars C, cross-beam B, and runners A A, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand.

STEPHEN E. FOSTER.

Witnesses:

JNO. A. RECK,

VERNON BELL.