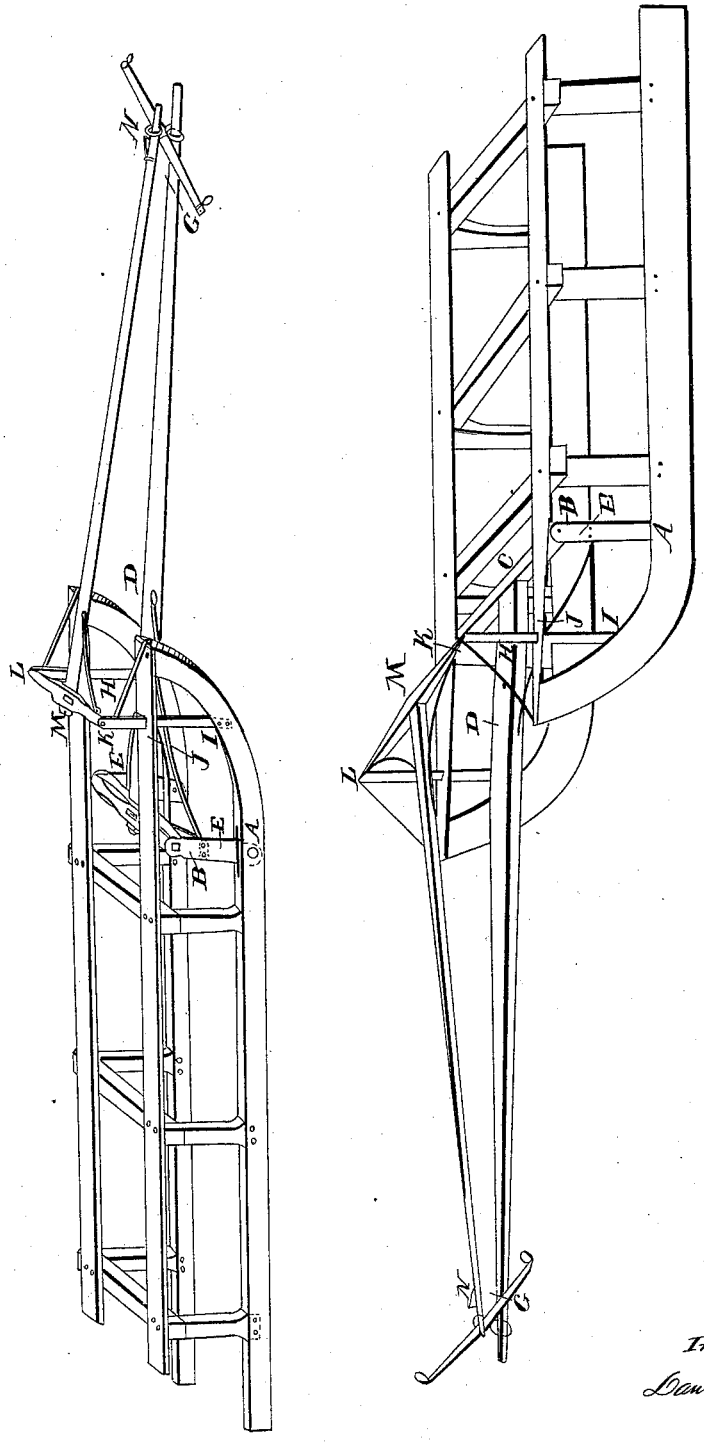
D. CARPENTER.

Sleigh.

No 1,334. Patented Sept. 20, 1839.



Inventor.
Daniel Carpenter

UNITED STATES PATENT OFFICE.

DANIEL CARPENTER, OF NELSON, NEW YORK.

SLEIGH.

Specification of Letters Patent No. 1,334, dated September 20, 1839.

To all whom it may concern:

Be it known that I, DANIEL CARPENTER, of the town of Nelson, in the county of Madison and State of New York, have invented a mode of constructing sleds or sleighs so as to lessen the power required to draw or hold back a given weight, which is new and improved; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in applying the power used to draw the sleighs directly at the bottom of the runner or as near the place of friction or resistance as possible, and the power used in holding a sleigh back in going down hill over the sleigh or in such a manner as that the tongue or pole used in holding back shall incline to push down instead of up in the act of holding back.

To enable others skilled in the art to make and use my invention I proceed to describe the construction and operation of a sleigh built upon my improved plan.

I dress out my runners some ten or twelve inches longer than usual and perfectly straight from the back end to the point A, in the drawing hereto annexed. Then I apply the power used in drawing the sleigh. At the point A, I cut a mortise in each runner open at the top of the runner and long enough lengthwise of the runner to allow the standard erected therein to move freely forward and back. In this mortise I erect a standard movable at the bottom around a bolt running through it and the runner of iron or other material of sufficient strength with a hole in each end and long enough to reach readily to the rave of the sleigh. The lower hole is to receive the bolt that passes through the runner at the mortise. The upper hole is to screw the bolt that passes into the end of the stick that connects the upper ends of the standards as at B.

I attach the tongue or pole of the drawing apparatus of the sleigh to the middle of the stick that connects the two standards as at C, and make braces running from a point in the tongue or pole as far forward as practicable as at D. To each standard far enough above the top of the runner to clear the snow as at E, I make braces running from the under side of the stick connecting the two standards to the same points E in the standards where the braces from the tongue or pole intersect them and fasten the braces to the standards by a bolt running through both braces and the standard at the point E. The braces are intended to keep the drawing apparatus in proper shape. This completes the drawing apparatus and it will be seen that the line of draft is from A to G, although the horses are fastened to the hames connecting the evener with the pole at H. The load should be placed upon the sleigh in such a manner as that the centers of its gravity shall be equi-distant between the point of draft A and the back end of the runner.

For the purpose of holding the sleigh back in going down hill I make another tongue or pole distinct from that connected with the drawing apparatus in the following manner. I fasten a standard in each runner as at I which runs up through the rave so far forward as not to be in the way of the whiffletrees as at J, and high enough to incline the tongue or pole connected with them to push down instead of up when the sleigh is being held back. The upper ends of these two standards are connected together by a roller running from K to L, into the middle of which as at M, the upper tongue or pole is attached as in the common method of constructing an ordinary sleigh tongue. I place the bolt or brace for holding back the sleigh in the upper side of this tongue as at N. I make the neckyoke between the two tongues or poles with a ring on the upper side and one on the lower side of the neckyoke—the upper one to receive the upper tongue or pole and the lower one to receive the lower pole.

What I claim as my invention and desire to secure by Letters Patent is—

The construction of the pole or perch connected with the drawing apparatus or lower part of the sleigh with the one attached to the apparatus for holding back on the upper part of the sleigh for the purpose and in the manner herein above described.

Dated July 20, 1839.

DANIEL CARPENTER.

Witnesses:

RICHARD STEVENS,
JOHN P. SEAVER.