

(No Model.)

H. & J. K. PANGBORN.
SLEIGH RUNNER.

No. 528,606.

Patented Nov. 6, 1894.

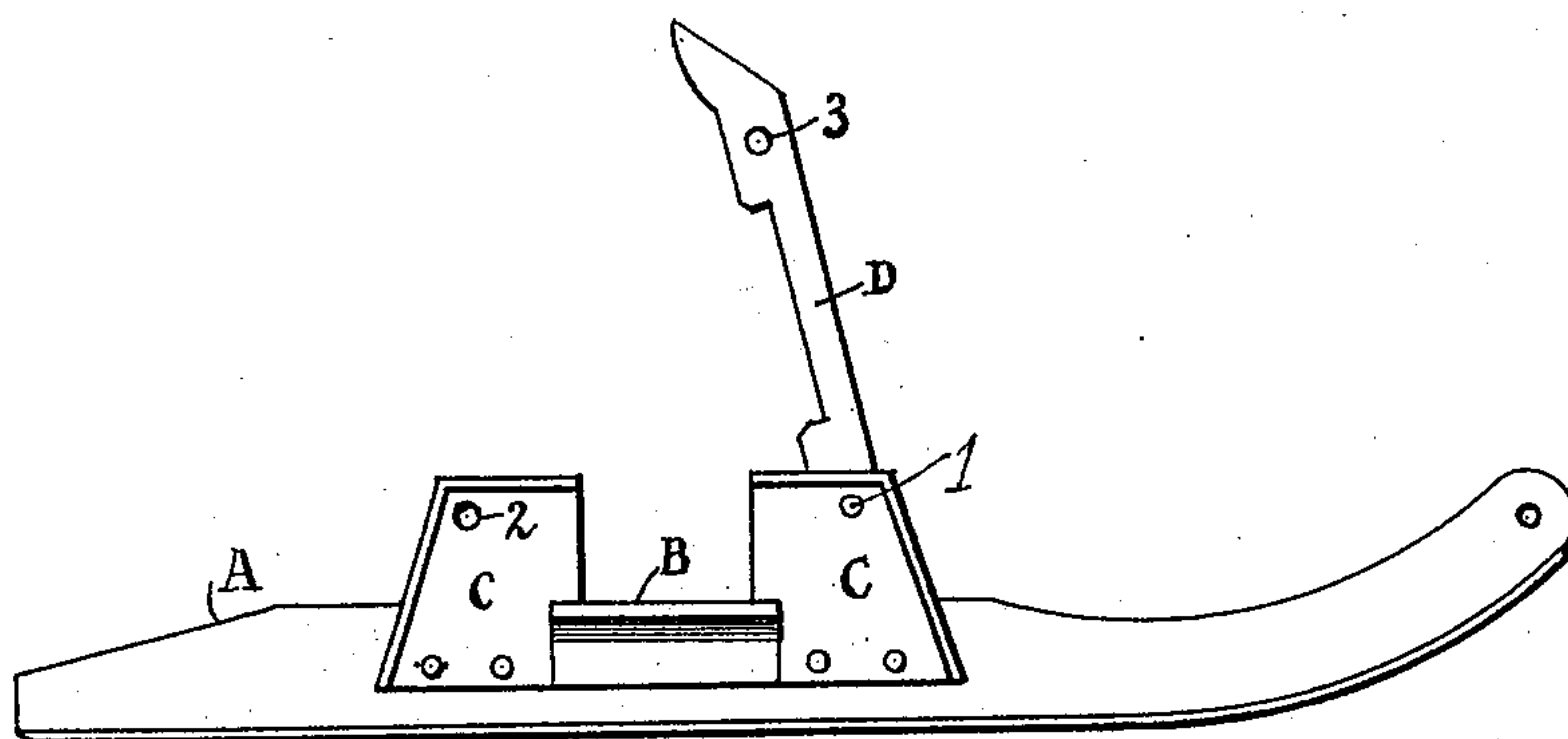


Fig. 1

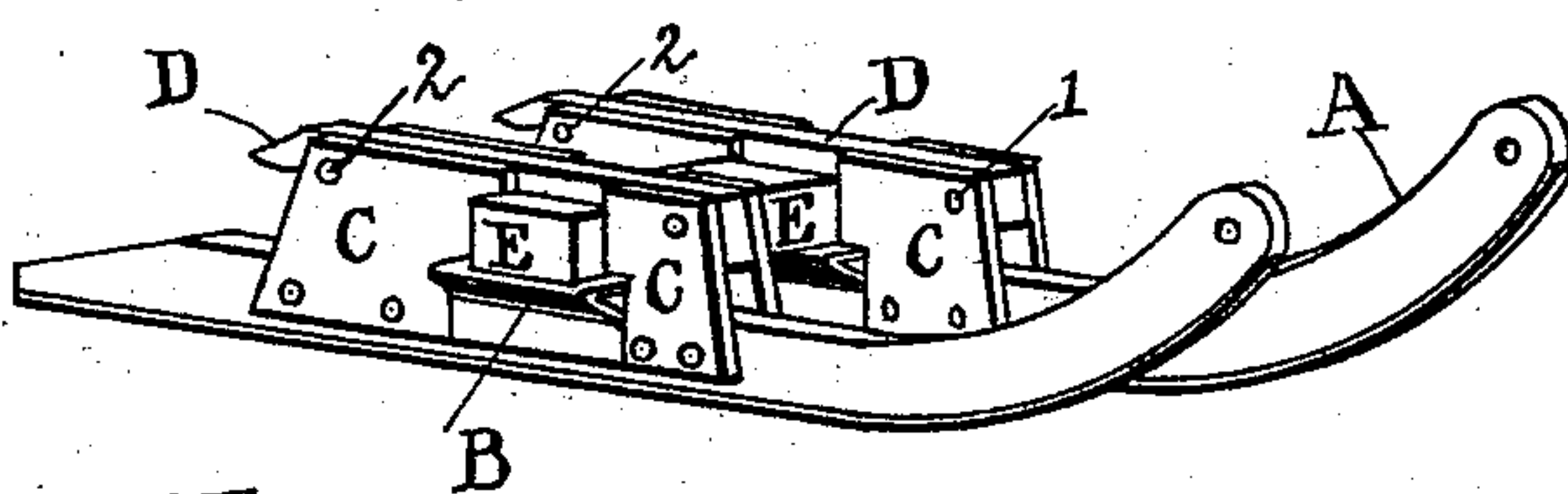


Fig. 2

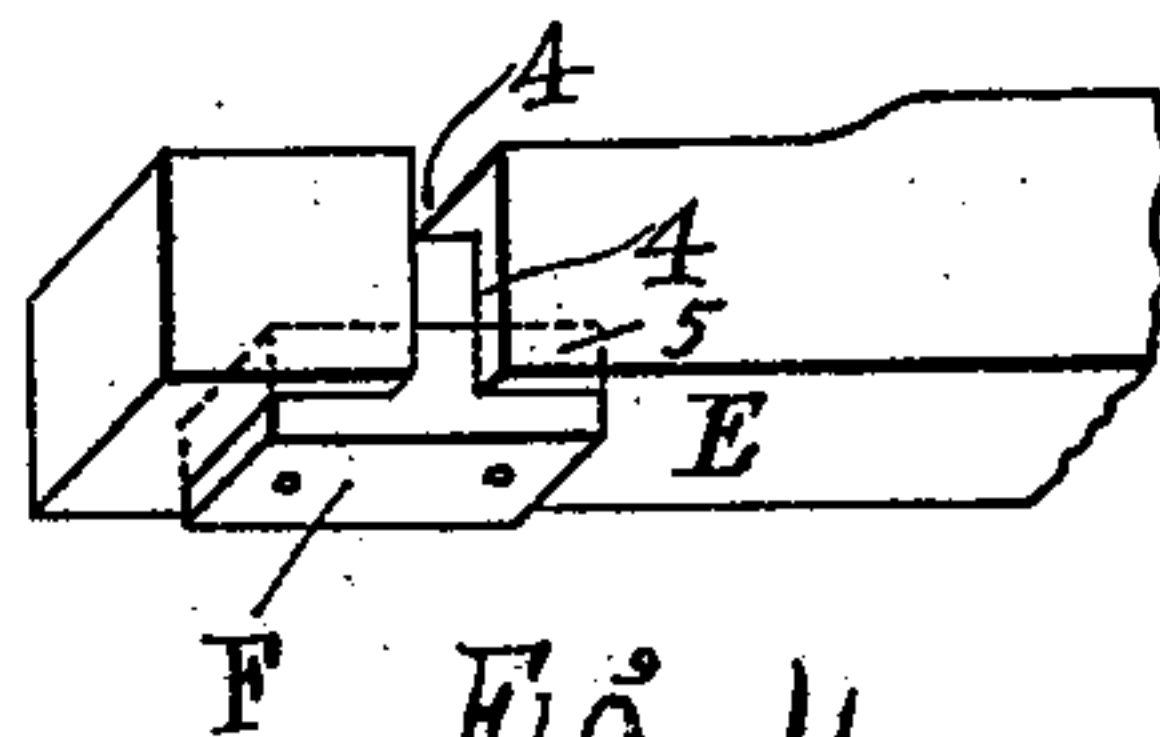


Fig. 4

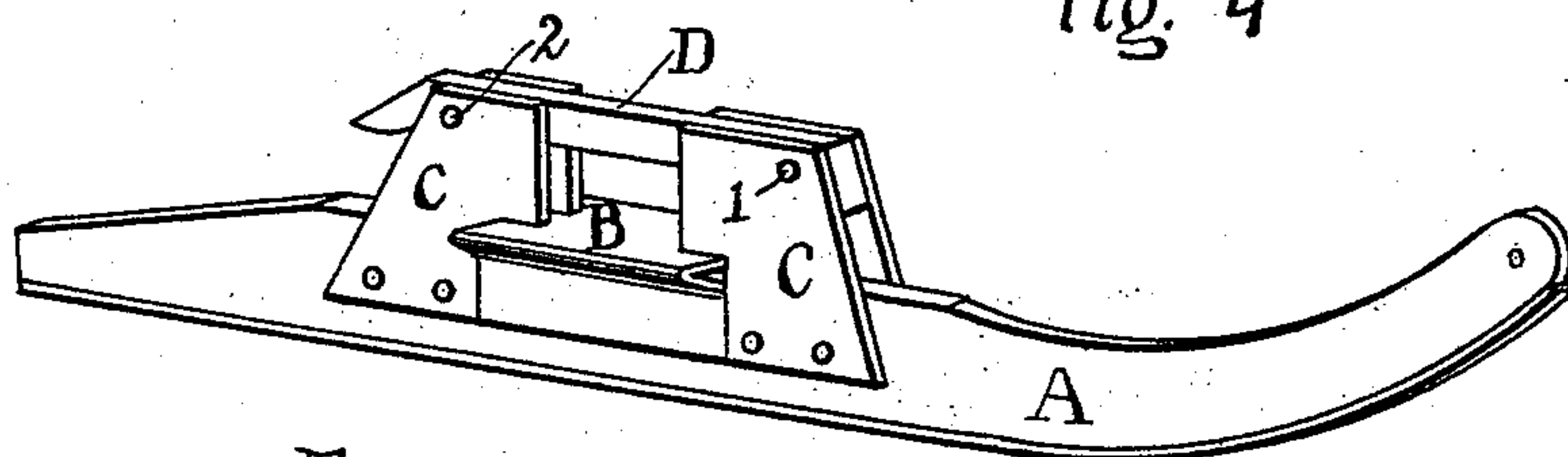


Fig. 3

Attest
J. Beckbissinger.
James Robbins

James K. Pangborn
Henry Pangborn Inventors
By J. H. Swain
Attorney

UNITED STATES PATENT OFFICE.

HENRY PANGBORN AND JAMES K. PANGBORN, OF MENOMINEE, MICHIGAN.

SLEIGH-RUNNER.

SPECIFICATION forming part of Letters Patent No. 528,606, dated November 6, 1894.

Application filed February 5, 1894. Serial No. 499,198. (No model.) Patented in Canada May 23, 1893, No. 43,009.

To all whom it may concern:

Be it known that we, HENRY PANGBORN and JAMES K. PANGBORN, citizens of the United States, residing at Menominee, in the county of Menominee and State of Michigan, have invented certain new and useful Improvements in Sleigh-Runners, (patented in Canada May 23, 1893, No. 43,009;) and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

Our invention is a sleigh and consists in the novel construction and arrangement of the parts and the combination shown and claimed.

Figure 1 is a side view of our metal runner. Fig. 2 is a perspective of the sleigh. Fig. 3 is a perspective of the metal runner showing the parts in different position. Fig. 4 is a perspective of the beam of the sleigh showing the cushion.

A is a sleigh runner and is made of T (inverted) shaped metal, the horizontal of the T forming the shoe of the runner and the perpendicular of the T forming the rave and being integral therewith.

B is a metal knee and may be riveted to the rave of the runner or formed integral therewith. At each end of the knee are standards C, C, riveted to the rave of the runner and extending above the top of the knee B and beam E. It is obvious that these standards could be cast integral with the runner.

D is a tongue hinged to the standard on one side of the knee and beam by the pivot 1 and is adapted to turn down across the beam to the other standard and be secured thereto by the bolt 2 passing through the standard and hole 3 in the tongue as shown, or otherwise.

E is a cross beam engaging the sleigh runner and is provided with a groove 4 upon the top and two sides thereof adapted to receive the tongue D when it is turned down across the beam. On the under side of the beam is a recess 5 at the point where the beam rests upon the sleigh knee. In this recess we secure a cushion F made of rubber or other

suitable material. This cushion projects below the lower surface of the beam so that the beam when not under pressure does not touch the knee of the sleigh but rests upon the cushion. It is obvious that this cushion could be secured to the knee and answer the same purpose.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a sleigh runner, the combination with a solid metal runner made of T (inverted) shaped material with a metal knee secured to the runner, metal standards C, C at each end of the knee and extending above the top of the knee and beam, and a metal tongue D pivoted to one standard and adapted to turn down across the beam and be rigidly secured to the other standard, substantially as and for the purpose set forth.

2. In a sleigh runner, a device for securing the beam to the knee of the sleigh consisting of metal standards C, C on each side of the knee and extending above the top of the beam, the metal tongue D hinged to one standard and adapted to turn down across the top of the beam and be rigidly secured to the other standard, thereby rigidly holding the beam in place, as and for the purpose set forth.

3. In a sleigh, the combination of a metal runner made of T (inverted) shaped material, a metal knee secured thereto, standards C, C at each end of the knee, and extending above the knee and beam, the tongue D hinged to one standard and adapted to be turned down across the beam and be secured to the other standard, of the cross beam provided with transverse grooves at each end to receive the tongue, and provided also with a recess on its under side for receiving a cushion, and the cushion, substantially as described.

4. In a sleigh, a cushion between the knee and the beam consisting of hard rubber or other suitable material arranged as shown.

5. A sleigh runner formed of T (inverted) shaped material, the perpendicular of the T forming the rave, the beam resting on the knee, metal standards on each side of the beam secured to the rave, and a metal tongue hinged to one standard and adapted to be

turned across the beam and be rigidly secured to the other standard, substantially as and for the purpose set forth.

6. In a sleigh, the combination with a T
5 (inverted) shaped metal runner, a metal knee, a cross beam, of a cushion between the knee and the cross beam and means for holding the beam on the knee, substantially as and for the purpose set forth.

10 7. A cross beam for sleigh runners consist-

ing of a beam having a recess on the under side of each end adapted to receive a cushion, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

HENRY PANGBORN.
JAMES K. PANGBORN.

Witnesses:

HENRY T. HATTON,
GUY M. GOLDEN.