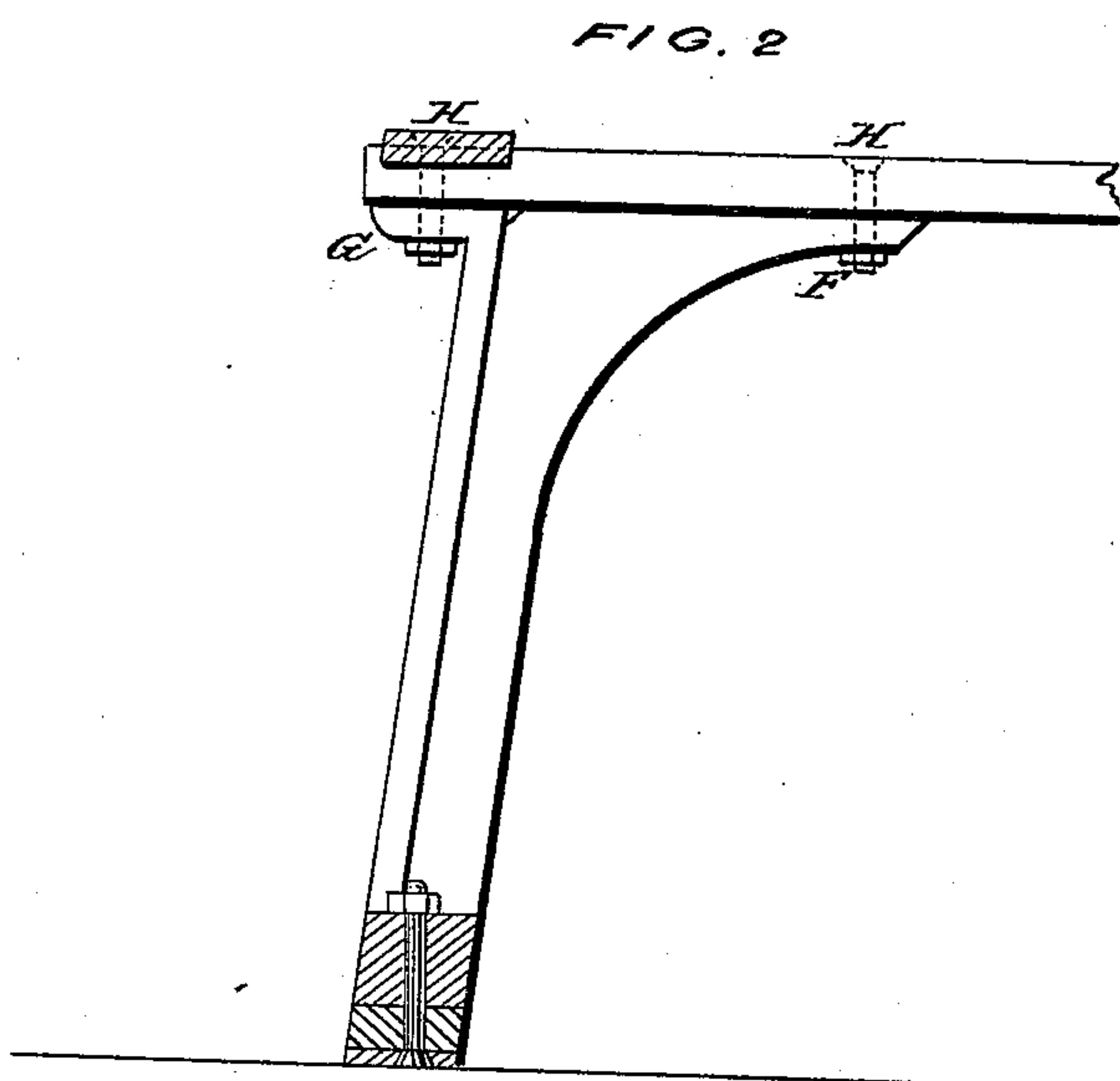
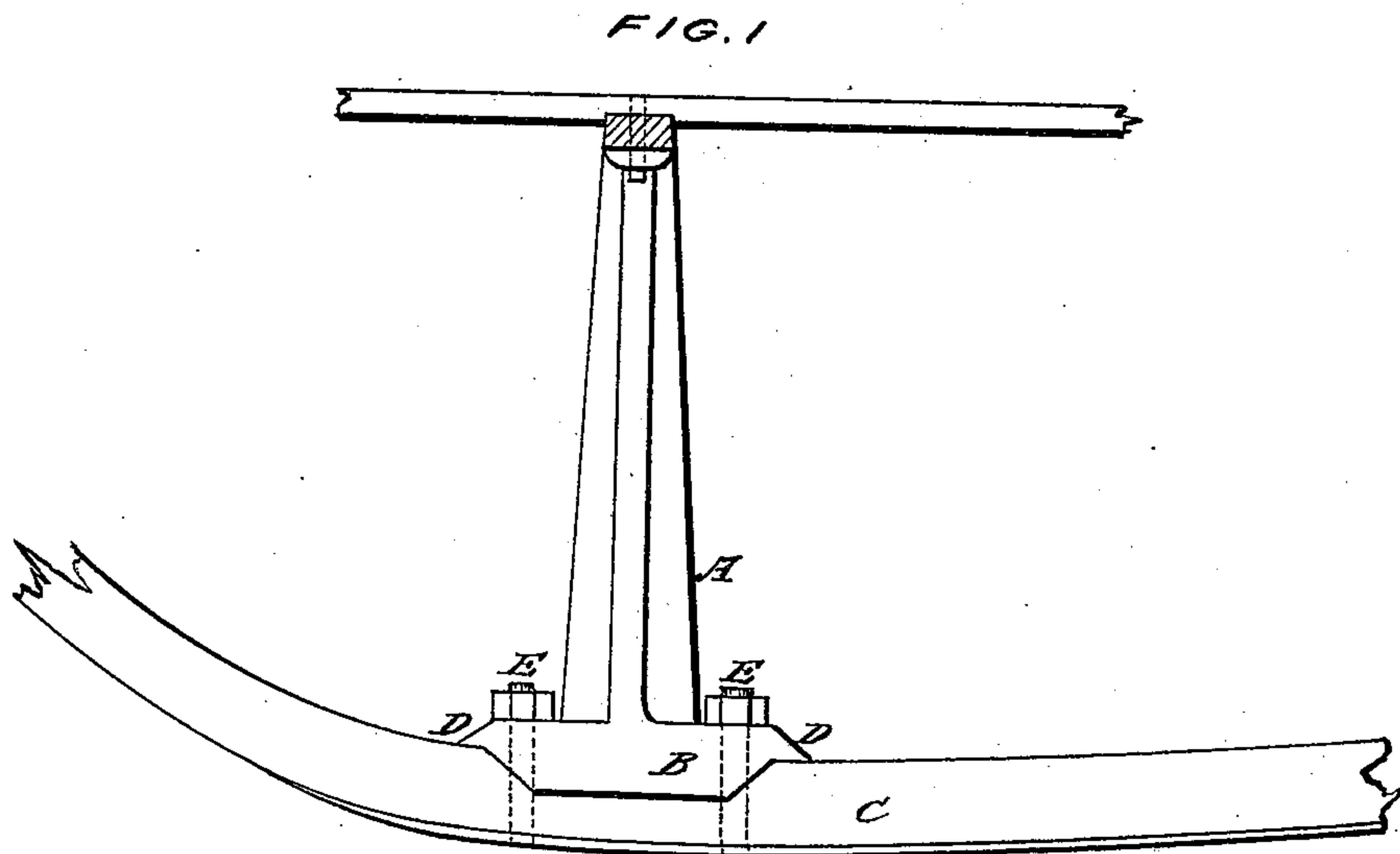


O. JOHNSON,
Sleigh Knee.

No. 107,055.

Patented Sept. 6, 1870.



WITNESSES:

A. Bennet
Wm. F. Brooks

INVENTOR:

O. Johnson
per Wm. F. Brooks
attorney.

United States Patent Office.

OBADIAH JOHNSON, OF LASSELLSVILLE, NEW YORK.

Letters Patent No. 107,055, dated September 6, 1870; antedated August 25, 1870.

IMPROVEMENT IN SLEIGH-KNEES.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, OBADIAH JOHNSON, of Lasselssville, in the county of Fulton and State of New York, have invented a new and useful Improvement in Sleigh-Knees; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in sleigh-knees made of cast metal; and

The invention consists in the particular construction of the knee, as hereinafter described.

Figure 1 is a side elevation of my improved knee and a part of a sleigh-runner, showing the application of the said knee, and

Figure 2 is a rear view of the knee and section of the runner.

Similar letters of reference indicate corresponding parts.

I form with the vertical parts A, by casting therewith, the elongations B for extending along the runners C, to increase the bearing surface thereon, and to brace the vertical part more firmly, and I form the bottoms of these parts B shorter than the tops, and bevel the ends from the bottoms toward the tops as far as the depth of the "boxing" or recesses in the tops of the runners, which I make, as clearly shown

in fig. 1, for the reception of the said bottoms; and on the line of the top of the runner I make the projections D for lapping over the runners each side of the recesses.

These foot-plates B, so arranged, I secure to the seats by the bolts E passing through the projecting ends and through the runner.

The upper ends of the knees I extend inwardly in the direction of the beams for a considerable distance, as at F, and outwardly, as at G; also, for bracing and for securing by bolts H.

This arrangement provides a very strong construction for sleighs, the knees being braced in both places in the direction of the greatest strain.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

As an article of manufacture, the sleigh-knee herein described, formed of cast metal, and consisting of the vertical standard A, (T-shaped in cross-section,) with the inner and outer top extensions F G, and the foot formed of the elongations B for embracing the sides of the runner, and the projections D for lapping on the top thereof, all constructed as set forth and shown.

OBADIAH JOHNSON.

Witnesses:

S. S. STEWART,
NORMAN A. LASSELLS.