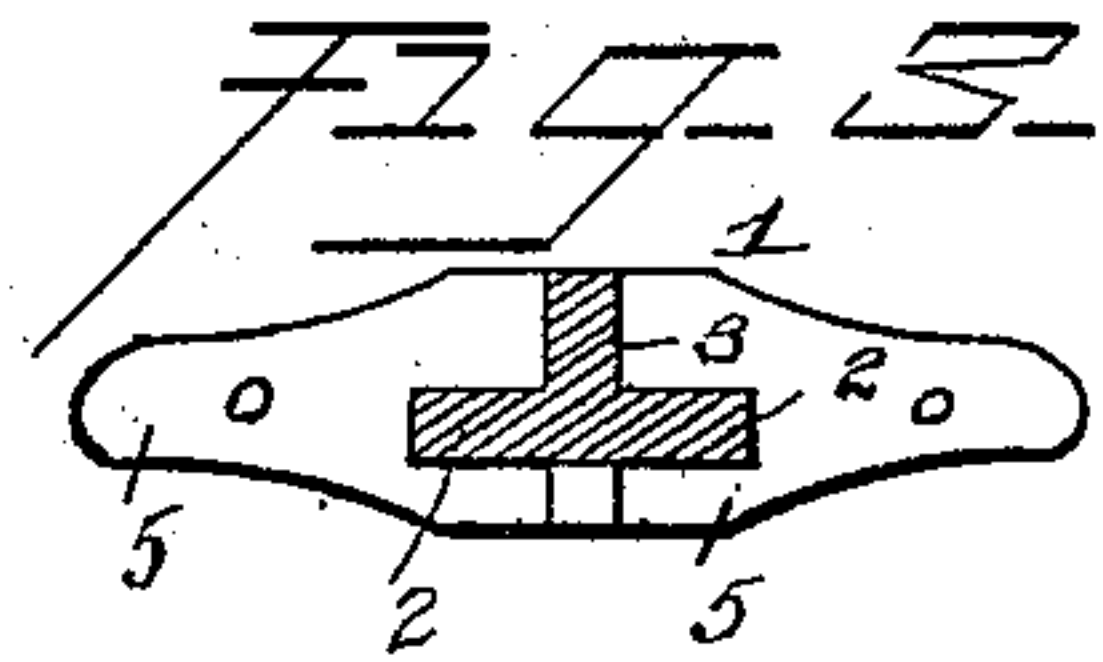
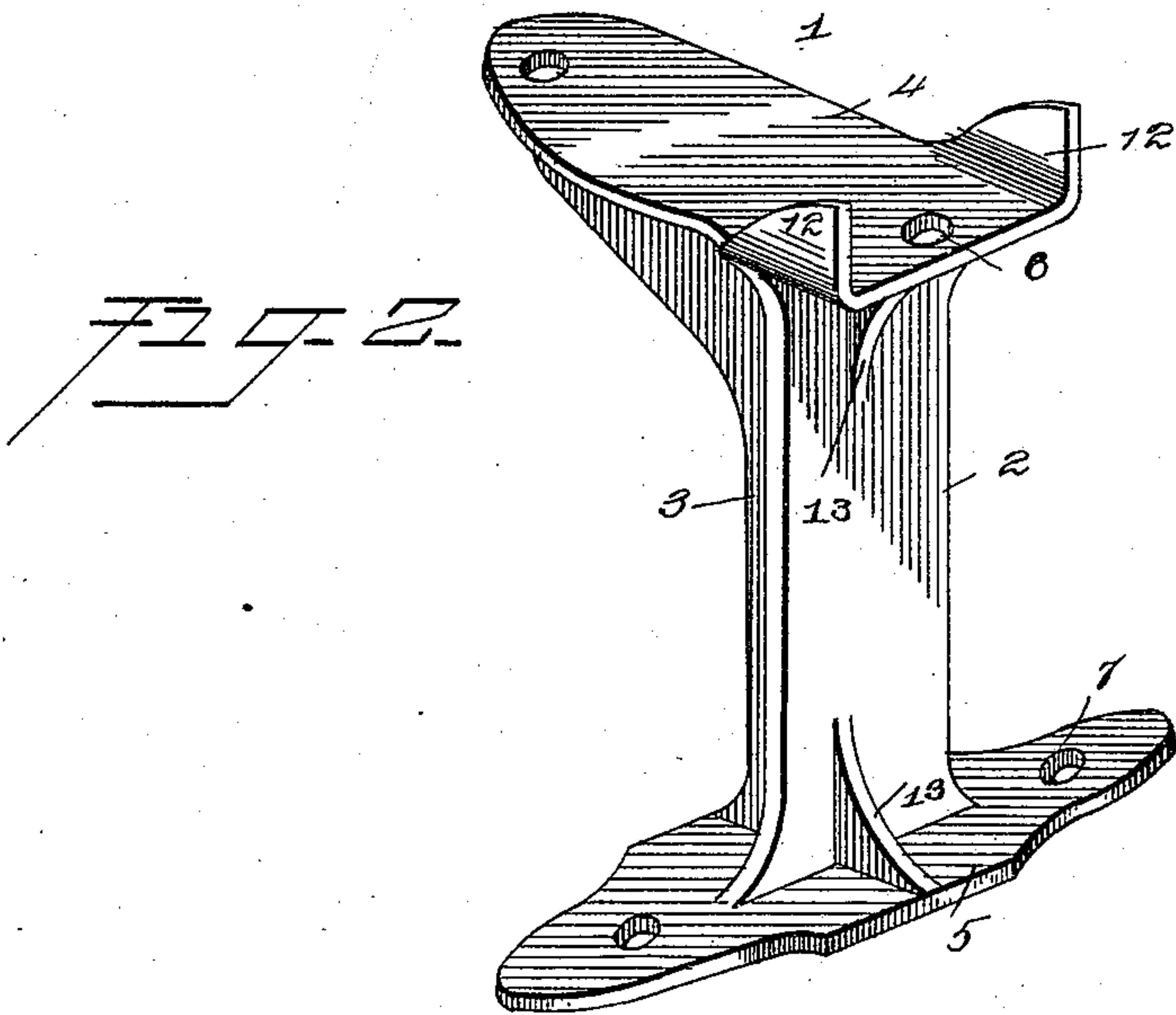
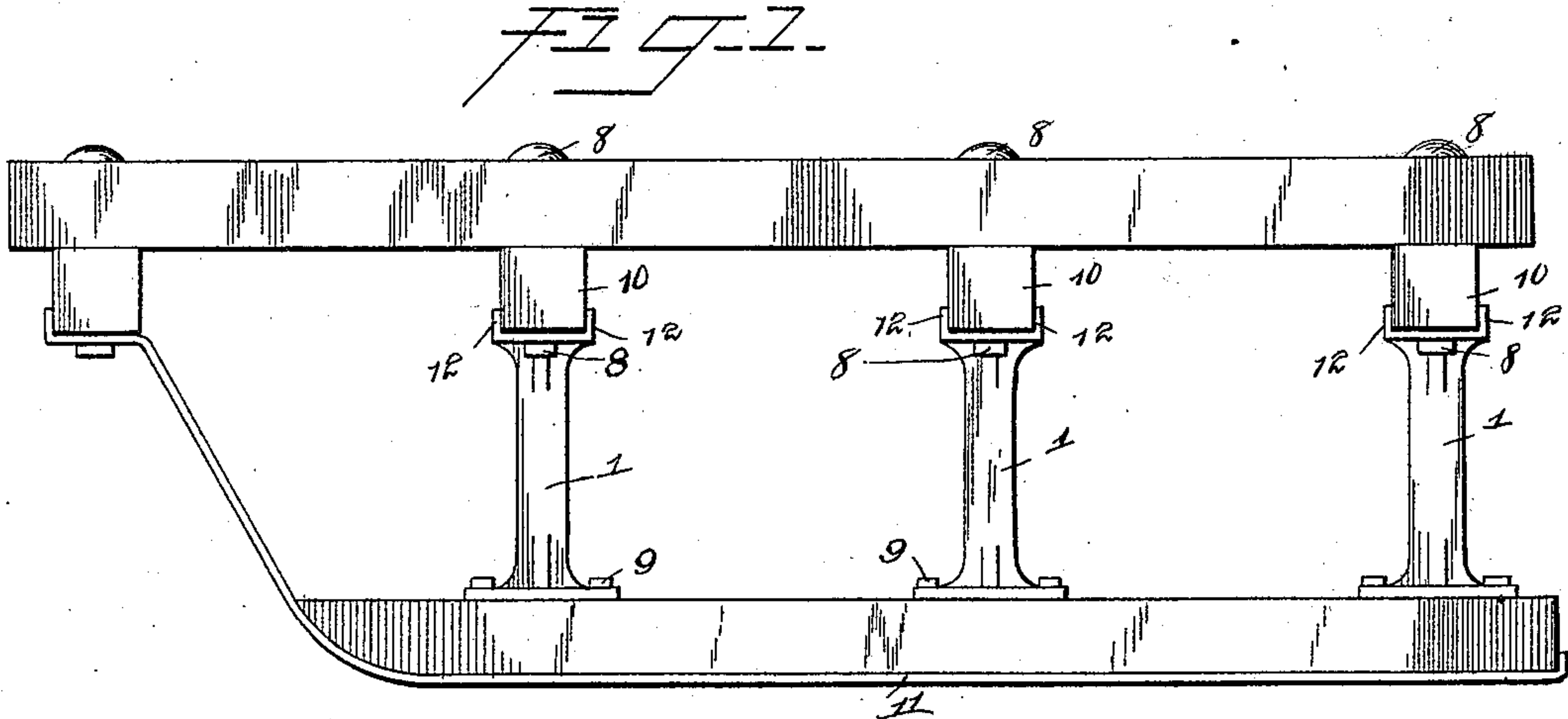


(No Model.)

E. B. WELLS.
SLEIGH KNEE.

No. 456,262.

Patented July 21, 1891.



Witnesses

Isaac Belmont
H. F. Riley

Inventor

E. B. Wells.

By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

ELIAS B. WELLS, OF COX'S CREEK, KENTUCKY.

SLEIGH-KNEE.

SPECIFICATION forming part of Letters Patent No. 456,262, dated July 21, 1891.

Application filed March 12, 1891. Serial No. 384,816. (No model.)

To all whom it may concern:

Be it known that I, ELIAS B. WELLS, a citizen of the United States, residing at Cox's Creek, in the county of Nelson and State of Kentucky, have invented a new and useful Sleigh-Knee, of which the following is a specification.

The invention relates to improvements in sleigh-knees.

10 The object of the present invention is to simplify and improve the construction of sleigh-knees and increase their strength and durability and to enable them to be readily secured in position.

15 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

20 In the drawings, Figure 1 is a side elevation of a sleigh provided with a knee constructed in accordance with this invention. Fig. 2 is a detail perspective view of the knee. Fig. 3 is a horizontal sectional view of the same.

25 Referring to the accompanying drawings, 1 designates a sleigh-knee constructed of metal, and being approximately T-shaped in cross-section and having the longitudinal flanges 2 and 3, forming a post, which is provided at its top and bottom with plates 4 and 5, and the longitudinal flanges are extended laterally at their tops and bottoms to support and strengthen the top and bottom plates 4 and 5.

35 The top and bottom plates 4 and 5 are formed integral with the knee, and are provided with perforations 6 and 7, through which pass bolts 8 and 9, which secure the knee to the lower face of a cross-bar 10 of the sleigh-frame and to the upper face of the adjacent sleigh-runner. The plates present a

flat surface to the bar 10 and runner 11, and are arranged at right angles to each other and extend longitudinally of the bar and the runner; and the top plate 4 is provided at its outer end with integral triangular upwardly-extending lugs 12, which are disposed on opposite sides of the plate 4 and embrace the bar 10 and prevent any liability of the bar 10 splitting. The outer face of the knee is provided at its upper and lower ends with integral ribs 13, which greatly increase its strength.

It will readily be seen that the knee is simple and inexpensive in construction, strong, and durable, and adapted to be readily secured to a sleigh.

What I claim is—

A sleigh-knee constructed of metal and comprising the post approximately T-shaped in cross-section and having the longitudinal flanges 2 and 3, which are enlarged and extended laterally at their upper ends, the top and bottom plates 4 and 5, formed integral with the post and arranged at right angles to each other and provided with perforations and adapted to extend longitudinally of the cross-bar and the sleigh-runner and present flat surfaces to the same, the strengthening-ribs 13, formed integral with the outer face of the knee and the plates 4 and 5, and the upwardly-extending triangular lugs oppositely disposed at the outer end of the top plate 4 and adapted to receive between them the side bar, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ELIAS B. WELLS.

Witnesses:

ALEX. B. STALLARD,
GEORGE E. PRICE.