(No Model.)

O. G. ANDERSON & J. R. SJOLANDER.

SLEIGH KNEE.

No. 508,266. Patented Nov. 7, 1893.

Fig. 1.

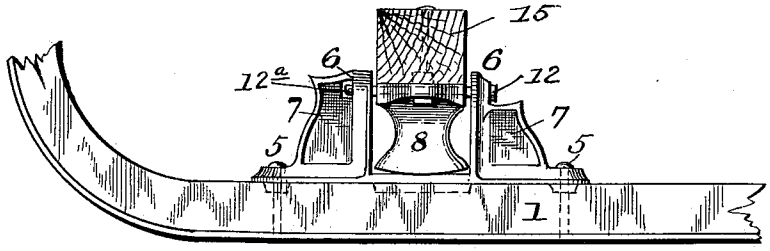


Fig. 2.

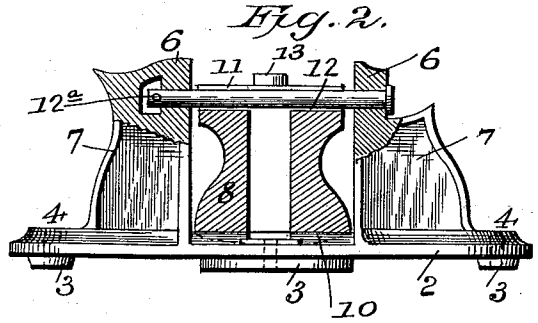


Fig. 3.

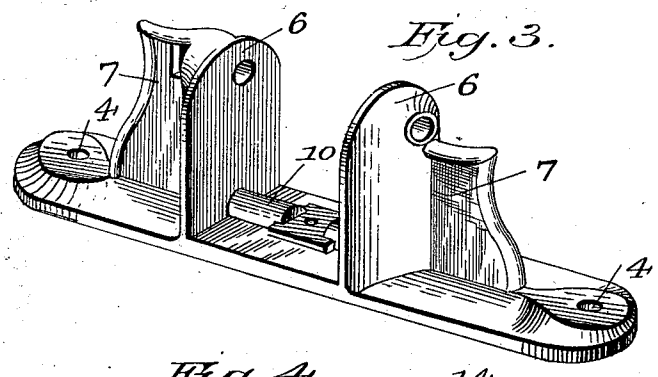
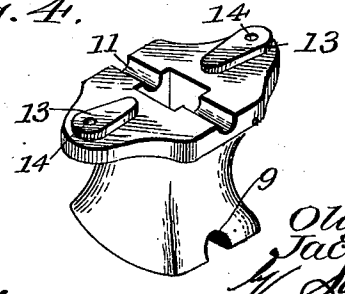


Fig. 4.



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OLAF G. ANDERSON AND JACOB R. SJOLANDER, OF IRONWOOD, MICHIGAN.

SLEIGH-KNEE.

SPECIFICATION forming part of Letters Patent No. 508,266, dated November 7, 1893.

Application filed February 18, 1893. Serial No. 462,807. (No model.)

To all whom it may concern:

Be it known that we, OLAF G. ANDERSON, and JACOB R. SJOLANDER, citizens of the United States, and residents of Ironwood, in the county of Gogebic, and State of Michigan, have invented certain new and useful Improvements in Sleigh-Knees; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Our invention relates to improvements in sleigh knees by which the runners are connected with the beams which support the body of the sleigh.

The object of the invention is to provide an improved construction of sleigh knee which shall possess superior advantages with respect to simplicity, economy in manufacture, and efficiency in use.

The invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings: Figure 1 is a side elevation of a portion of a sleigh knee with our improvements applied thereto. Fig. 2 is a longitudinal sectional view of the knee. Fig. 3 is a perspective view of the plate or portion of the knee which is to be secured to the runner. Fig. 4 is a similar view of the block to which the beam is secured.

In the said drawings the reference numeral 1 designates a sleigh runner of any ordinary construction and 2 a metallic plate having at each end and at the center, bosses 3, formed with recesses 4, through which pass bolts 5, whereby the plate may be secured to the runners. Intermediate of its ends, and at equal distances from its center, the plate is formed with upwardly projecting standards 6, provided with strengthening ribs 7, all made integral or in one piece. Between these standards is located a metal block 8, preferably cast hollow to reduce the weight and save material, provided on its under side with a semi-circular groove 9, with which engages a correspondingly formed rib 10, on the plate 2. The upper side of this block is formed with a groove 11, similar to groove 9, to receive a removable headed bolt 12, which passes through aligned apertures in the upper ends of the uprights. This bolt has an aperture at one end to receive a retaining pin 12^a. The block is also formed with bosses 13 provided with apertures 14, by which it is secured to the beam 15.

From the above it will be seen that the knee consists of but three parts, viz., the plate 2, the block 8, and the bolt 12, which render it economical to manufacture. The block fits loosely between the standards and the bolt 12 rests loosely in the groove 11, so that said block may have a slight longitudinal movement which renders the liability of injury less than when the runners and beams are rigidly connected together.

Having thus described our invention, what we claim is—

A sleigh knee comprising the plate adapted to be secured to a runner formed with the standards having aligned apertures at their upper ends, and with a horizontal rib between said standards, the block adapted to be secured to a beam having a groove on its under side with which said ribs engage, and a groove upon its upper side, and the bolt passing through said apertures, and engaging with the groove in the upper side of the block, substantially as described.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

OLAF G. ANDERSON.
JACOB R. SJOLANDER.

Witnesses:
E. T. LARSON,
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