(No Model.)

C. O. SNIPPEN.

SLEIGH KNEE.

No. 458,294. Patented Aug. 25, 1891.

Fig. 1

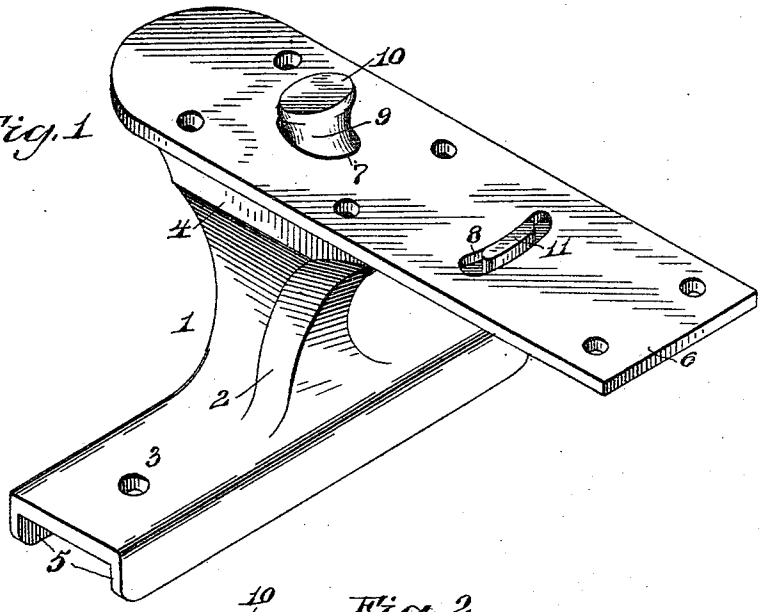


Fig. 2

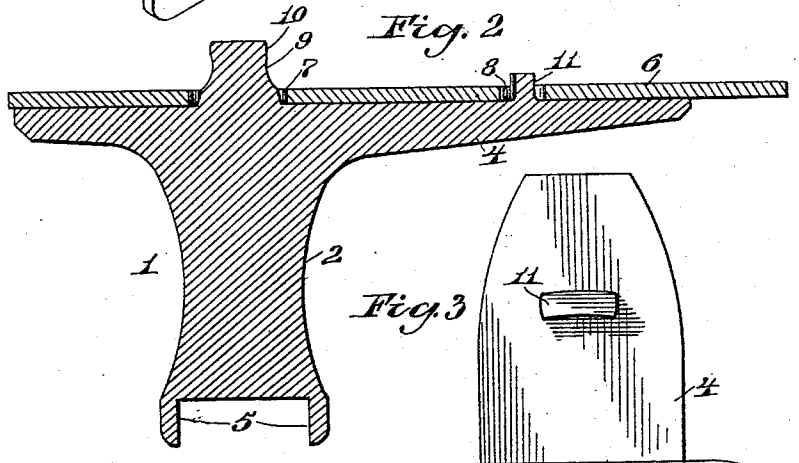


Fig. 3

Witnesses

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UNITED STATES PATENT OFFICE.

CHRIS. O. SNIPPEN, OF WARREN MILLS, WISCONSIN.

SLEIGH-KNEE.

SPECIFICATION forming part of Letters Patent No. 458,294, dated August 25, 1891.

Application filed April 9, 1891. Serial No. 388,268. (No model.)

To all whom it may concern:

Be it known that I, CHRIS. O. SNIPPEN, a citizen of the United States, residing at Warren Mills, in the county of Monroe and State of Wisconsin, have invented a new and useful Sleigh-Knee, of which the following is a specification.

The invention relates to improvements in sleigh-knees.

The object of the present invention is to simplify and improve the construction of sleigh-knees and to enable the runners to move freely and prevent the same being bent under the body of the sleigh and causing the latter to upset.

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 claims hereto appended.

In the drawings, Figure 1 is a perspective view of a sleigh-knee constructed in accordance with this invention. Fig. 2 is a transverse sectional view. Fig. 3 is a top plan view, showing the knee in the act of being removed.

Referring to the accompanying drawings, 1 designates a sleigh-knee comprising a post 2, a bottom plate 3, formed integral with the post and extending longitudinally of the runners of a sleigh, and a top plate 4, formed integral with the post and extending transversely of the bottom plate and longitudinally of the cross bars or beams of the sleigh-frame. The bottom-plate is provided with perforations, through which pass bolts for securing a runner to the knee, and it has longitudinal flanges 5, which depend and form a recess for the reception of the runners. The top plate 4 is secured to the frame of a sleigh by a plate 6, which is provided with perforations for the reception of the bolts for securing it to a cross bar or beam, and the plate 6 is provided near its outer end with an elongated opening 7, and near its inner end with a curved slot 8. The elongated opening 7 is arranged to be engaged by a stud 9, projecting from the upper plate of the sleigh-knee and formed integral therewith and provided with an elongated head 10, which, when the knee is in operative position, extends transversely of the elongated opening 7 and prevents the withdrawal of the stud. The knee and sleigh-runner are capable of a slight lateral movement with the stud 9 as the pivot, and also a slight vertical or rocking motion, and the lateral movement is limited by a curved projection 11, which is formed integral with the top plate of the knee and is arranged to engage the curved slot 8 of the plate 6. When it is desired to remove the knee, the curved projection 11 is disengaged from the curved slot and the knee is turned to bring the elongated head longitudinally of the opening 7 to enable the stud to be disengaged from the plate. By this arrangement the runners of a sleigh are permitted free and easy motion, and there is no liability of their becoming bent beneath the body of the sleigh and causing the latter to upset.

What I claim is—

1. The combination of the sleigh-knee provided with the headed stud and the projection 11, and the plate 6, designed to be secured to a cross-bar of a sleigh-frame and provided with the elongated opening 7, adapted to be engaged by the headed stud, and having the slot 8, arranged to receive the projection 11, substantially as described.

2. The combination of the sleigh-knee comprising the post, the bottom plate having depending flanges, and the top plate provided with the stud having an elongated head and the curved projection 11, and the plate designed to be secured to a cross-bar of a sleigh-frame and having the elongated opening 7 and the curved slot 8, substantially as described.

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

CHRIS. O. SNIPPEN.

Witnesses:
OLE. L. OLSON,
ROYAL BECK.