(No Model.)

N. P. PETERSON.

SLEIGH KNEE.

No. 431,194. Patented July 1, 1890.

Fig. 1.

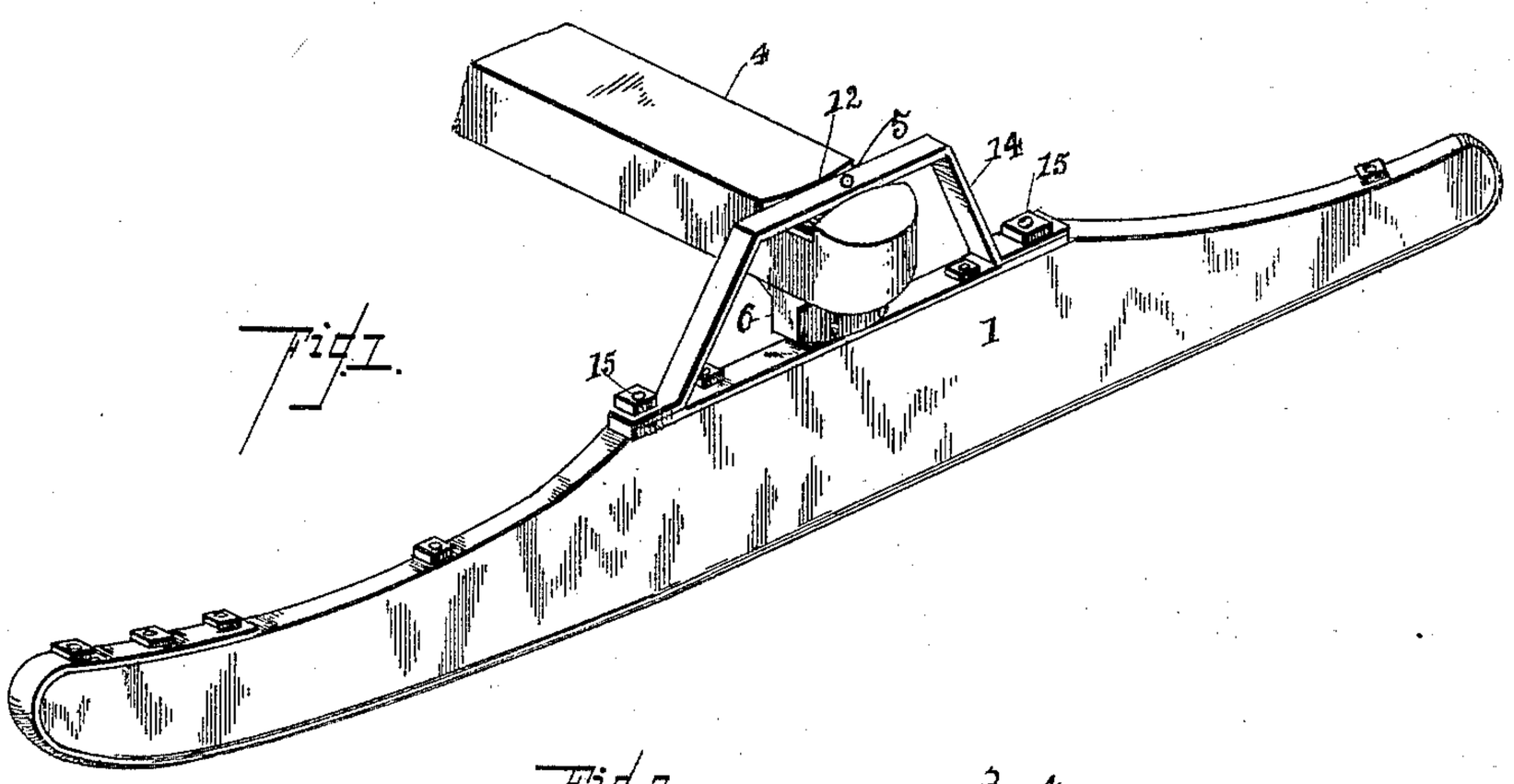


Fig. 2.

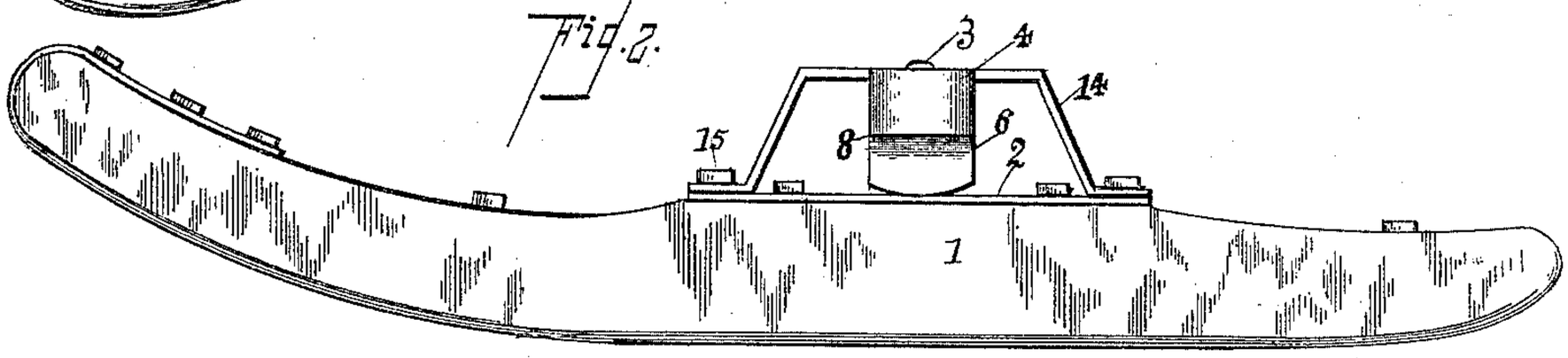


Fig. 3

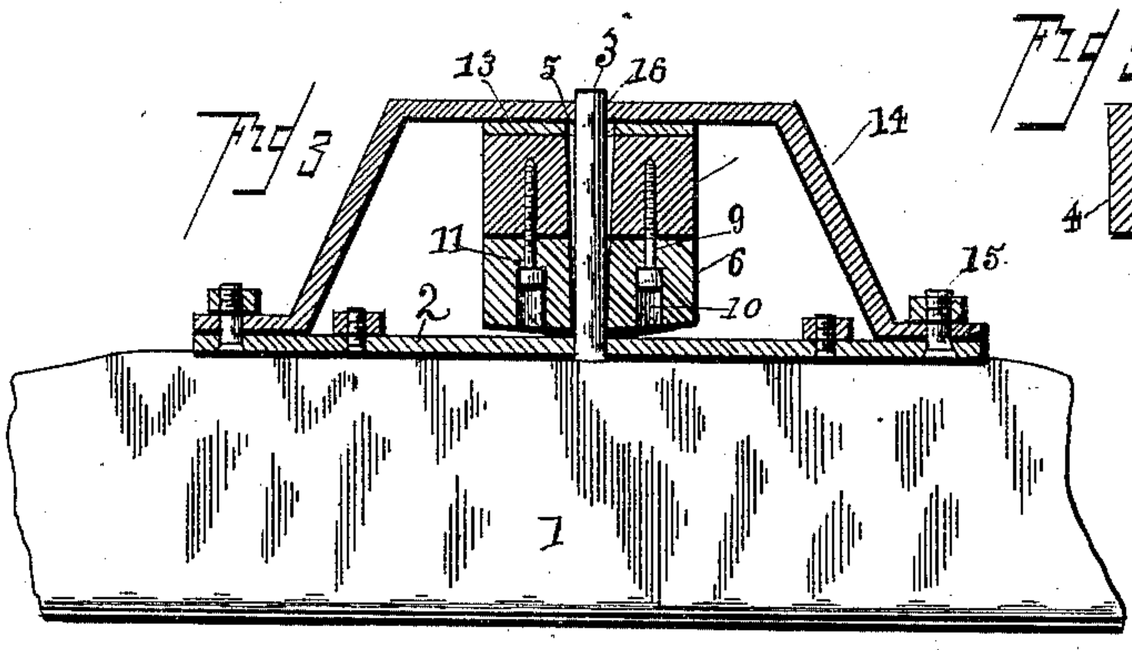


Fig. 5

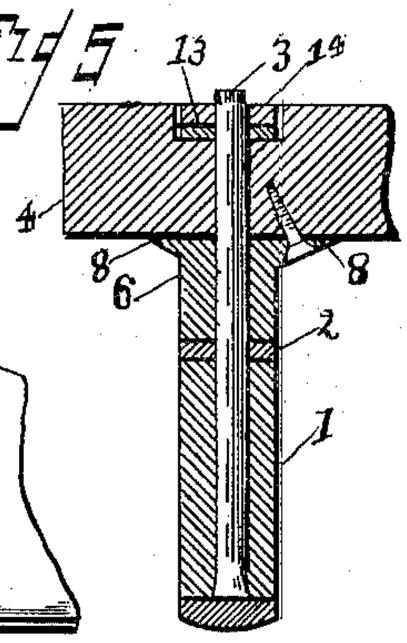
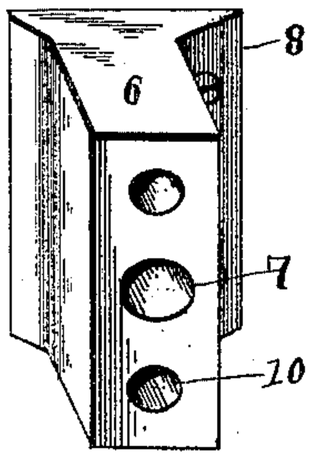


Fig. 4.



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UNITED STATES PATENT OFFICE.

NIELS PETER PETERSON, OF COLBY, WISCONSIN.

SLEIGH-KNEE.

SPECIFICATION forming part of Letters Patent No. 431,194, dated July 1, 1890.

Application filed March 28, 1890. Serial No. 345,756. (No model.)

To all whom it may concern:

Be it known that I, NIELS PETER PETERSON, a citizen of the United States, residing at Colby, in the county of Clark 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 provide a sleigh-knee of simple and inexpensive construction, capable of limited lateral movement to adjust itself to inequalities of the road.

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.

In the drawings, Figure 1 is a perspective view of a sleigh-knee constructed in accordance with this invention and shown applied to a beam. Fig. 2 is a side elevation. Fig. 3 is a longitudinal sectional view. Fig. 4 is a detail view of the supporting-block. Fig. 5 is a transverse sectional view.

Referring to the accompanying drawings, 1 designates the runner, which is provided on its upper edge at a point intermediate of its ends with a plate 2, having extending vertically therefrom a pivot-pin 3, that is securely seated in the runner, and is adapted to pivot the beam 4 and to enable the knee to have a slight lateral movement to overcome the inequalities of the road and to make the sleigh capable of easy running. The beam 4 is provided with an opening 5 to receive the pin 3, and has secured to its lower face a supporting-block 6, that is constructed of suitable metal, and is provided with a central conical opening 7, that registers with the opening 5, which is also conical and is adapted to permit the runner to have free and easy movement on its pivot 3, and the upper edge of the supporting-block 6 is provided with oppositely-disposed flanges 8, that rest against the lower face of the beam 4 and form a broad supporting-surface. The supporting-block 6 is secured to the beam by screws or bolts 9, that pass through vertical openings 10, that are arranged upon opposite sides of the central opening 7, and the said openings 10 are provided with shoulders 11 near their upper ends, which engage the heads of the screws or bolts 9. The upper face of the beam is provided with a transverse recess 12, in which is secured a wear-plate 13, that lies at the bottom of the recess 12 and prevents a brace 14 wearing the beam, and the recess is slightly greater in width than the brace and permits the knee to have a limited lateral movement to accommodate itself to the inequalities of the road. The ends of the brace 14 are perforated and are secured by nuts to threaded pins 15, that project from the upper face of the plate 2, that is secured to the upper edge of the runner, and the said brace is provided at a point intermediate of its ends with an opening 16, through which passes the pivot or pin 3, that projects vertically from the plate 2.

From the foregoing it will readily be seen that the sleigh-knees constructed in accordance with this invention are simple and comparatively inexpensive in construction and are adapted to be readily applied to the beam of a sleigh, and are capable of limited lateral movement to adjust themselves to inequalities of the road and enable a sleigh to run with great ease.

What I claim is—

The combination of the runner having the plate 2 secured to its upper face and provided with the vertically-projecting pivot or pin 3, the beam having a conical opening 5 and pivoted to the runner and provided in its upper face with the transverse recess 12, having its side walls diverging from the middle to the ends and forming enlarged ends and permitting a lateral swinging of the runner, the supporting-block having the oppositely-disposed perforated flanges 8 and provided with the central conical opening 7 and the shouldered openings 10, extending through the body of the block, said flanges being bolted or similarly secured to the lower face of the beam and having the heads of the bolts or screws engaging the shoulders of the openings, the wear-plate, and the brace of less width than the middle of the recess 12 and much smaller than the ends of the said recess.

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

NIELS PETER PETERSON.

Witnesses:

GUS SCHULTZ,

HENRY EDER.