(No Model.)

J. W. SHOURDS.

BOB SLEIGH.

No. 384,724. Patented June 19, 1888.

Fig. 1.

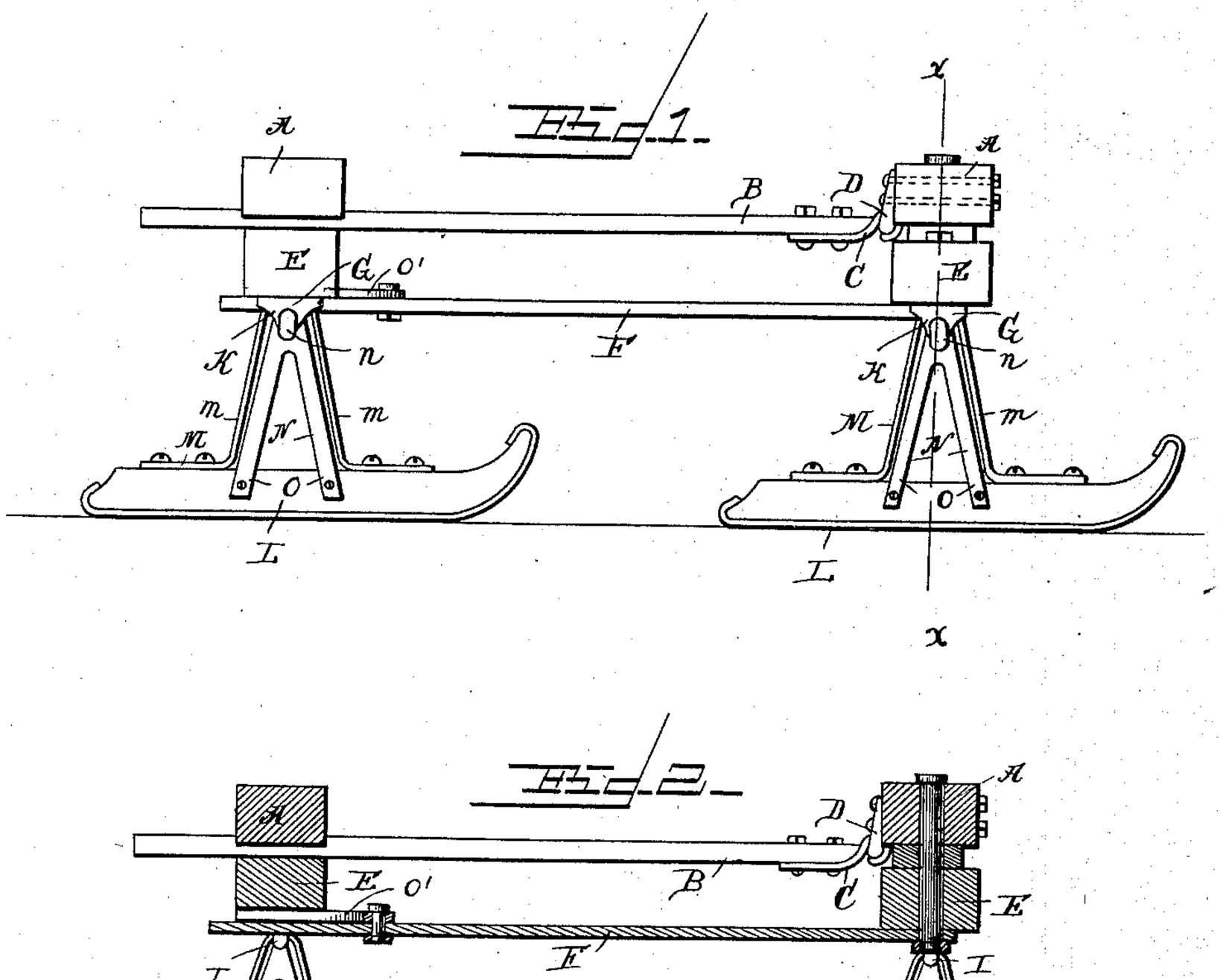
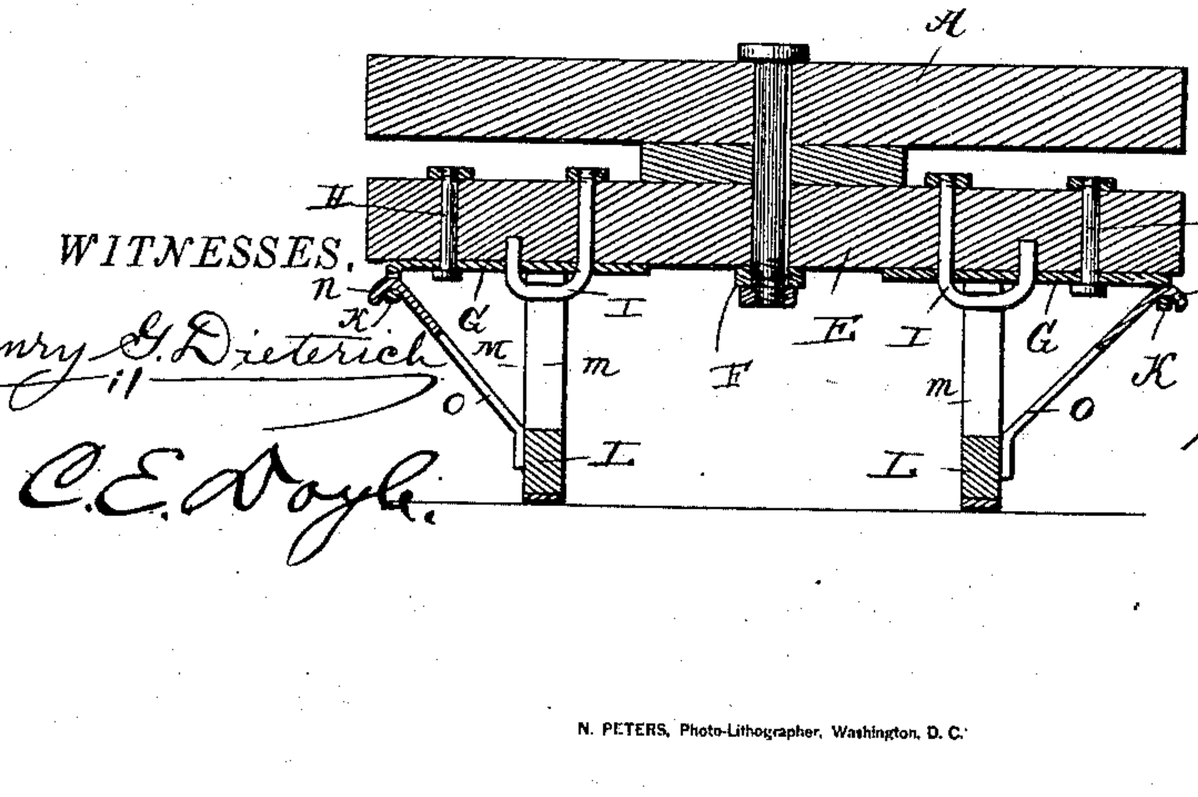


Fig. 2.

Fig. 3.



WITNESSES.

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JOSEPH W. SHOURDS, OF REEDSBURG, WISCONSIN.

BOB-SLEIGH.

SPECIFICATION forming part of Letters Patent No. 384,724, dated June 19, 1888.

Application filed March 24, 1888. Serial No. 268,417. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH W. SHOURDS, a citizen of the United States, residing at Reedsburg, in the county of Sauk and State of Wisconsin, have invented new and useful Improvements in Bob-Sleighs, of which the following is a specification.

My invention relates to improvements in bob-sleighs; and it has for its object to provide an improved knee which will allow free rocking movement to the runners and at the same time prevent straining of the parts.

A further object of the invention is to provide a removable rave which will extend the entire length of the sleigh and serve as a rest for the skids in loading.

With these objects in view the invention consists in a certain novel construction and arrangement of parts, fully set forth hereinafter, and illustrated in the accompanying drawings, wherein—

Figure 1 is a side view of a sleigh provided with my improvements. Fig. 2 is a central longitudinal section thereof. Fig. 3 is a transverse section on the line *x x*, Fig. 1.

Referring by letter to the drawings, A A designate the front and rear bolsters, and B the raves, which are provided at their front ends with hooks or loops C, engaging keepers D on the rear side of the front bolster. The rear bolster is attached to the raves and is removable therewith.

E E represent the beams, which are connected in the usual way by the perch F, and to the under side of the beams are secured the wear-plates G. This plate is provided with apertures through which are passed the bolt H and the sides of the keeper I. One side of the keeper is extended through the beam to form a bolt, on which is screwed a nut at the upper side of the beam. The inner end of the wear-plate is provided with a depending apertured ear, K, for a purpose to be hereinafter explained.

L L represent the runners, to which are attached the knees M, each of which is formed in a single piece and comprises the convergent legs *m m*, connected at their upper ends and mounted on the keeper I, and the horizontal ears at the lower ends of the said legs secured to the runner.

N represents the brace, having a hook, *n*, at its upper end engaged in the apertured ear on the wear-plate, and the said brace comprises the divergent arms O O, which are attached at their lower ends to the runner. The runners are capable of a rocking motion to enable them to pass over uneven surfaces without straining the knees. The raves are so constructed as to be movable, and they are designed to act as a support for skids in loading. The raves are not connected to the beam directly, and, being loose, they do not bear any of the strain of pulling.

O′ represents a half-circle, which is secured to the under side of the rear beam and projects forward under the rear end of the reach. The center of this half-circle is provided with a tapped aperture, *o*, in which is engaged the threaded end of a bolt, P, which is passed vertically through the reach.

Having thus described my invention, I claim—

1. In a bob-sleigh, the combination, with the runner, of the knee attached to the runner and comprising the converging sides or legs *m m*, the beam, and the wear-plate secured to the beam and having a keeper engaging the upper end of the knee, substantially as specified.

2. In a bob-sleigh, the combination of the wear-plate secured to the beam and having a depending apertured ear, K, the keeper I on the plate, the knee secured to the runner and having the converging legs *m m* mounted at their upper ends on the keeper I, and the brace N, having a hook, *n*, engaging the apertured ear K, and divergent arms O O, attached to the runner, substantially as and for the purpose specified.

3. In a bob-sleigh, the combination, with the front and rear beams mounted on the runners, as described, of the front bolster having keepers D on its rear side, the side raves, B, having loops on their front ends engaged in the keepers, and the rear bolsters attached to the raves, substantially as specified.

4. In a bob-sleigh, the combination, with the beams and the runners, of the side raves loosely connected or pivoted to the sleigh and adapted to be removed, substantially as specified.

5. In a bob-sleigh, the combination of the front and rear beams having the runners at-

tached thereto, the reach attached at its front end to the front beam, the half-circle attached to the rear beam and having a tapped aperture at its center, and the bolt passing through the reach and engaging the said tapped aperture, substantially as and for the purpose specified.

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

JOSEPH W. SHOURDS.

Witnesses:
W. A. WYSE,
A. E. MARKEE.