

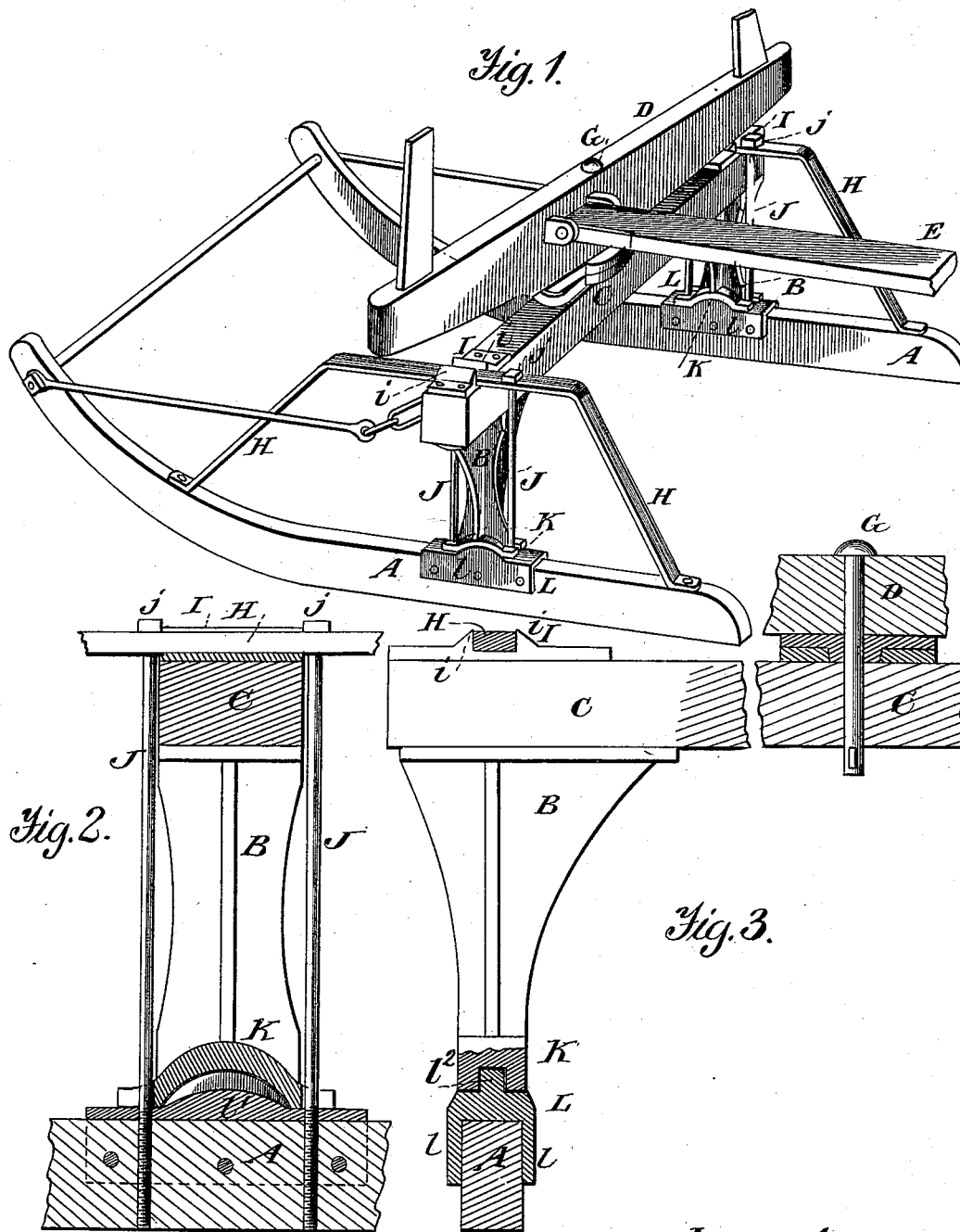
(No Model.)

O. S. RAYMOND.

BOB SLED.

No. 343,200.

Patented June 8, 1886.



Witnesses.
A. Ruppert.
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UNITED STATES PATENT OFFICE.

ORSON S. RAYMOND, OF NEW CASSEL, WISCONSIN.

BOB-SLED.

SPECIFICATION forming part of Letters Patent No. 343,200, dated June 8, 1886.

Application filed March 8, 1886. Serial No. 194,424. (No model.)

To all whom it may concern:

Be it known that I, ORSON S. RAYMOND, a citizen of the United States, residing at New Cassel, in the county of Fond du Lac and State of Wisconsin, have invented certain new and useful Improvements in Bob-Sleds; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The invention will first be described in connection with the drawings, and then pointed out in the claim.

Figure 1 of the drawings is a perspective of the front sled; Fig. 2, a longitudinal vertical section through a runner and its knee, and Fig. 3 a vertical cross-section.

In the drawings, A represents the runners of front sled, B the knees, C the cross-bar, and D the bolster, the latter being connected with the rear sled by the pivoted reach E. Between the cross-bar C and bolster D are arranged the circle plates F F, through which passes the bolt G, that forms a pivot for the bolster.

H is the rave, made fast at each end to the runner and fitting between the guide-flanges *i i* of the plate I. It is also secured to the runners by the long bolt J, threaded at both ends, and held on top of the rave by a nut, *j*.

K is a curved plate, open-slotted at each end to receive the bolts J, and cast with the knee.

L is a plate having flanges *l l*, which lap the sides of the runner and are fastened thereto. On top of this plate is formed a curved convexity, *l'*, which fits, but not closely, a concavity in the bottom of plate K.

I am aware that the convexity *l* on the top of a flanged runner-plate, L, has been used with a concavity in the bottom of the knee; but in practice this is found to bring too great a strain upon the rave, and too much side strain upon the bolts J; hence I make the curved projection *l'* on the top of convexity *l*, and this projection fits into a corresponding cavity in the bottom of the knee, as clearly shown in Figs. 2 and 3 of the drawings. By this construction all dirt and moisture will readily find an exit, and side strain be taken off the bolts J J. My bolster-connection with king-bolt G also effectually prevents canting when the bobs are being turned around.

What I claim as new, and desire to protect by Letters Patent, is—

The flanged runner-plate L, provided on its convexity *l'* with the curved projection *l'*, in combination with a knee having a correspondingly-curved cavity in its bottom plate, K, as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

ORSON S. RAYMOND.

Witnesses:

J. V. HARTER,
WM. POOL, Jr.