

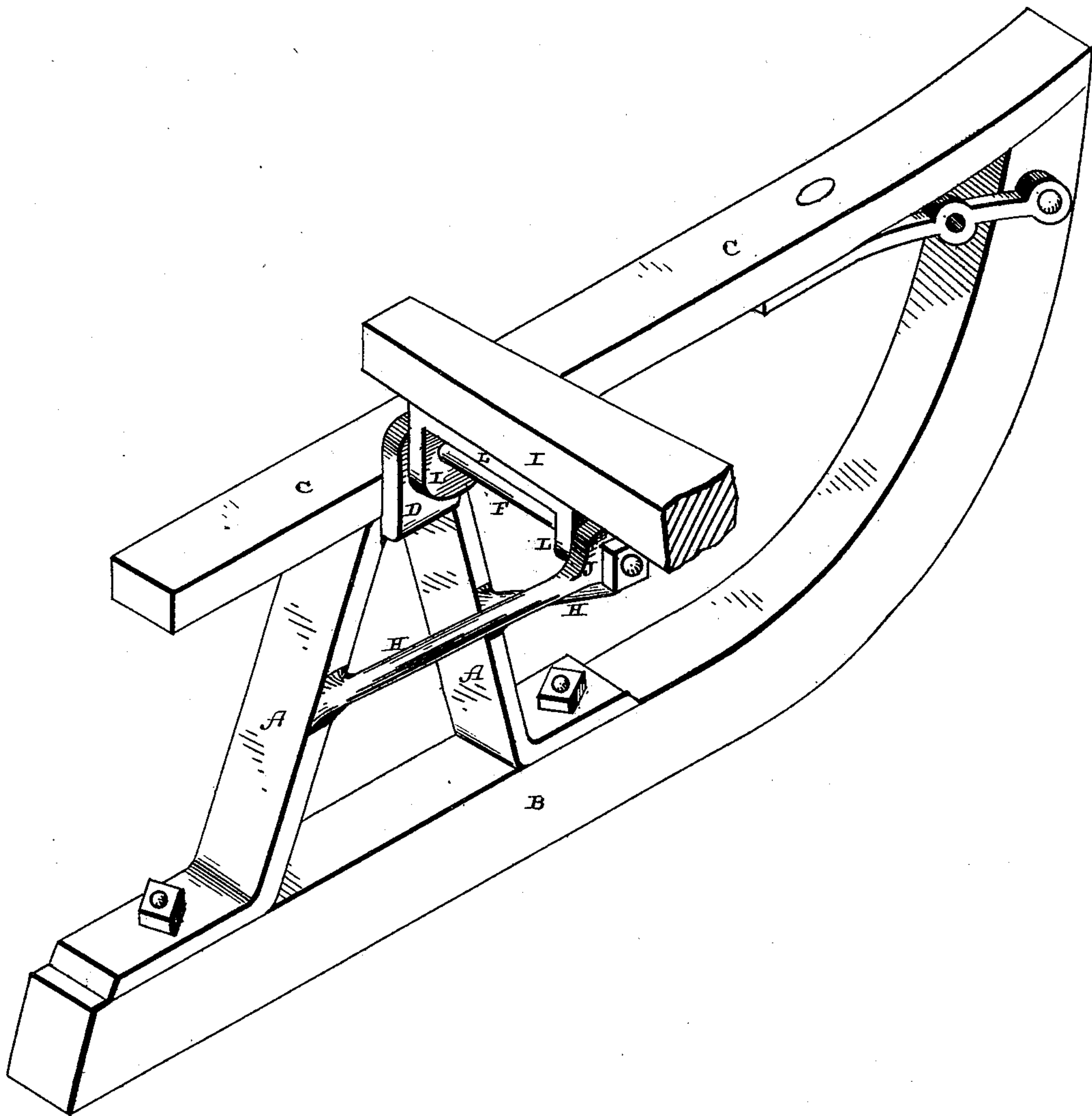
(No Model.)

L. FISHER.

SLED.

No. 366,946.

Patented July 19, 1887.



WITNESSES.

R. H. Gardner

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per

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UNITED STATES PATENT OFFICE.

LOUIS FISHER, OF FENNIMORE, WISCONSIN.

SLED.

SPECIFICATION forming part of Letters Patent No. 366,946, dated July 19, 1887.

Application filed May 18, 1887. Serial No. 238,662. (No model.)

To all whom it may concern:

Be it known that I, LOUIS FISHER, of Fennimore, in the county of Grant and State of Wisconsin, have invented certain new and useful Improvements in Sleds; and I do hereby 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 pertains to make and use it, reference being had to the accompanying drawing, which forms part of this specification.

My invention relates to an improvement in sleds; and it consists in the combination of a knee, which is provided at its top with an eye or bearing, with a brace or braces which are secured to this knee, and which has an eye formed at its inner end, a pivotal bolt which is passed through the two eyes or bearings, and the cross-bar provided with ears through which the pivotal bolt passes, as will be more fully described hereinafter.

The object of my invention is to hinge the cross-bar at each of its ends to one of the runners, thus giving each runner an independent motion of the other.

The accompanying drawing is a perspective of a sled-runner to which my invention is applied, taken from its inner side.

A represents the knee, which is formed from a suitable flat piece of metal, and which is secured at its lower ends upon the top of the runner B and its upper end to the under side of the rave C. Extending from the inner or outer edge of the top of the knee is the eye or bearing D, which extends a suitable distance above the top of the rave, and which forms one of the bearings for the pivotal bolt F.

Secured to the two upright portions of the knee and extending inwardly from their inner edges is the double brace H, which has its upper end formed into a second eye or bearing, J, for the pivotal bolt. Rigidly secured to the un-

der side of the cross-bar I is the casting L, which has its two ends turned downward into a vertical position, as shown, and perforated, so as to allow the pivotal bolt to pass through. These two ends of the casting L fit snugly inside of the two eyes or bearings D J, and through the ends and the two bearings is passed the pivotal bolt, which forms a hinge for connecting the cross-bar and the runner together.

Both ends of the cross-bar being connected to the runners, as above described, each runner has an independent movement of its own, so as to freely follow any inequalities of the ground, and thus make it easier for the team to draw the sled. Braces being secured to the knee, as here shown, a double bearing is formed for each one of the pivotal bolts, thus enabling longer, stronger, and better joints to be made in every way. Where only a single bearing is formed for the hinge or joint, the constant straining and wrenching of the different parts soon cause the joint to wear and break, something which can never occur where a long bearing is formed, as here shown.

Having thus described my invention, I claim—

The combination of the knee, which unites the runner and the rave together, and which is provided with an eye or bearing, D, a suitable brace which is secured to the inner side of the knee and which is provided with a second eye or bearing, a pivotal rod, the cross-bar, and the casting secured to the under side of the cross-bar and through which the pivotal bolt passes, substantially as shown and described.

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

LOUIS FISHER.

Witnesses:

WM. LONEY,
THOMAS SWART.