

B. M. DENISON & J. H. JUNE.
Reach-Couplings for Bob-Sleds.

No. 150,839.

Patented May 12, 1874.

Fig. 1.

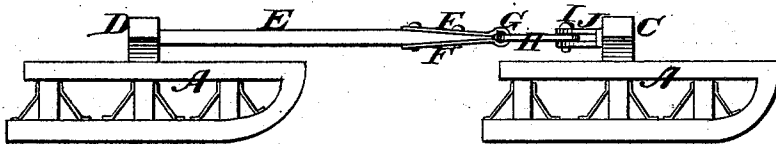


Fig. 2.

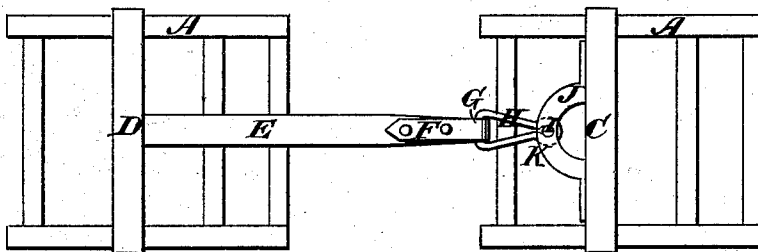
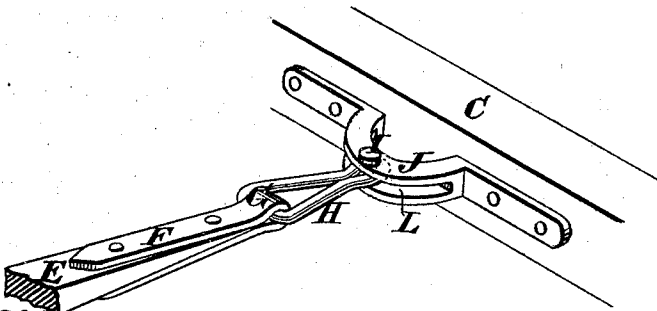


Fig. 3.



Witnesses.
C. H. Brown.
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Inventors.
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UNITED STATES PATENT OFFICE.

BARNARD M. DENISON AND JAMES H. JUNE, OF PARIS TOWNSHIP,
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IMPROVEMENT IN REACH-COUPPLINGS FOR BOB-SLEDS.

Specification forming part of Letters Patent No. **150,839**, dated May 12, 1874; application filed
March 21, 1874.

To all whom it may concern:

Be it known that we, BARNARD M. DENISON and JAMES H. JUNE, both of Paris township, in the county of Kent and State of Michigan, have invented a new and Improved Coupling for Bob-Sleds; and we do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings forming part of this specification.

Similar letters of reference in the accompanying drawings denote the same parts.

Our invention relates to improvements in the couplings for bob-sleds; and it consists in the employment of a double-jointed connection between the front end of the reach and the forward bolster, by means of which either sled is capable, within certain limits, of a lateral and vertical movement independent of the other.

The advantages of a reach so coupled at its front end to the forward bolster are, first, that the joint removes the strain from the reach in passing over rough ground; secondly, the splitting of the forward bolster is prevented; and, thirdly, it prevents the breakage of the reach.

In the accompanying drawings, A and B are the bob-sleds, provided with the forward and hinder bolsters C and D attached to the sleds in the usual manner. E is the coupling or reach connecting the bolsters, and attached rigidly to the hinder bolster by any of the ordinary means used for that purpose. To the front end of the reach E the plates F F are riveted or otherwise securely fastened, the front end of said plates terminating in an eye, G, through

which passes an open link, H, through the forward end of which passes the pin I. J is a bracket attached to the back face of the forward bolster, its central part being curved semicircularly, as seen at K, and provided with a semicircular slot, L, in which the forward end of the open link H can readily oscillate laterally on the pivotal pin I, the latter also passing through the front end of the open link H, thus allowing either sled to move laterally independently of the other, while the jointed connection between the eye G of the plates F F and the open link H permits either sled to move vertically independently of the other.

We are aware that the forward end of the reach connecting two bob-sleds has heretofore been jointed to the forward bolster by means of a staple attached to the former, and passing through an eye in a plate fastened to the forward end of the reach, thereby allowing a vertical movement of either sled independently of the other.

By our construction we are enabled to obtain both a vertical and a lateral movement of either sled independently of the other.

We claim as our invention—

The slotted bracket J attached to the forward bolster C, in combination with the link H and reach E, provided with the eye G at its forward end, substantially as described, and for the purposes set forth.

BARNARD M. DENISON.
JAMES H. JUNE.

Witnesses:

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