

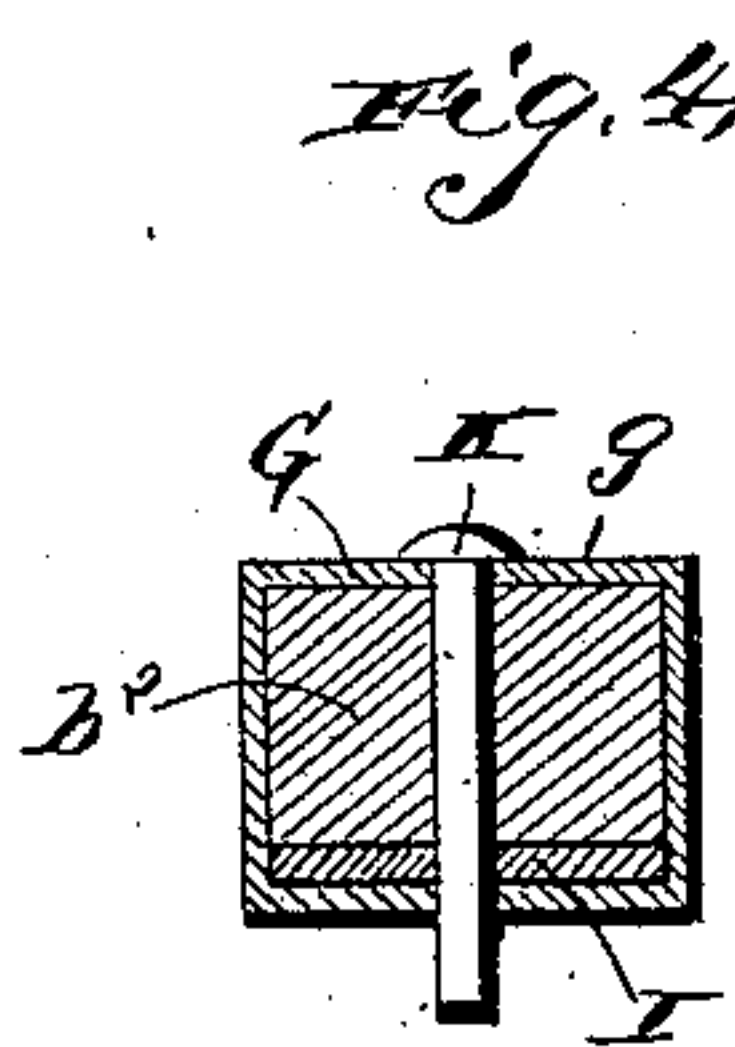
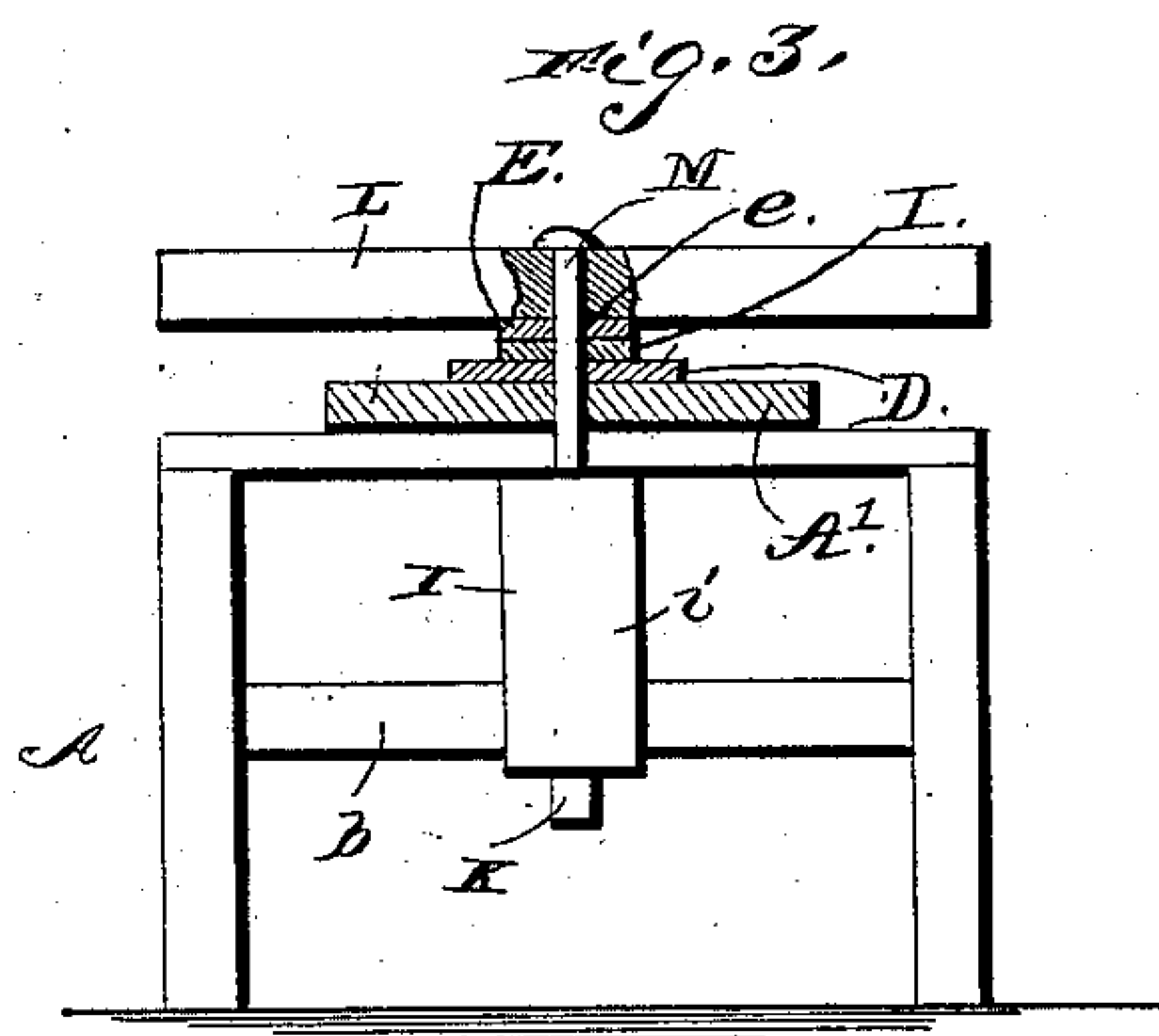
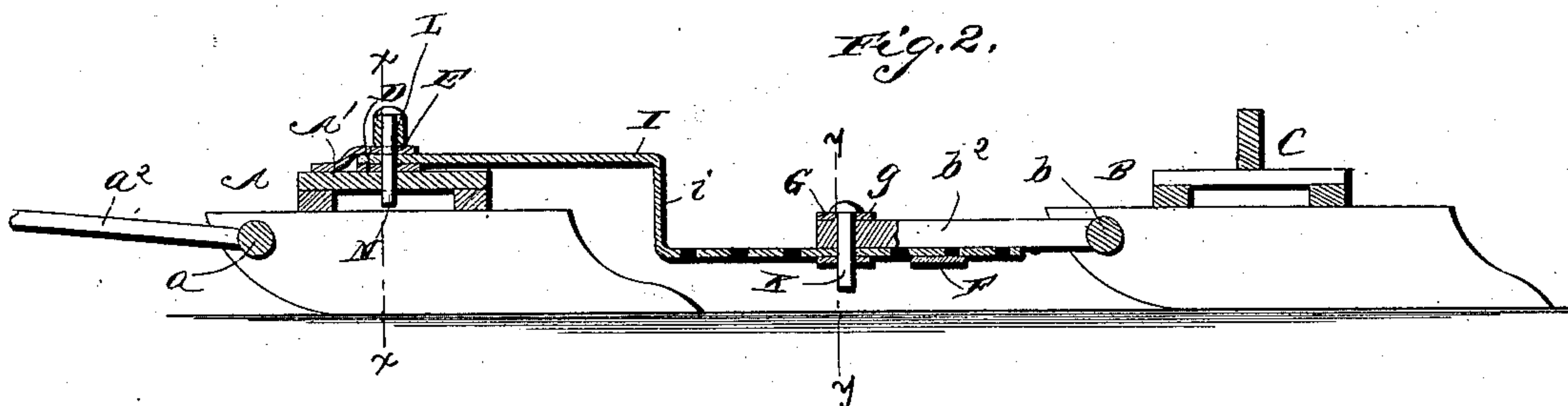
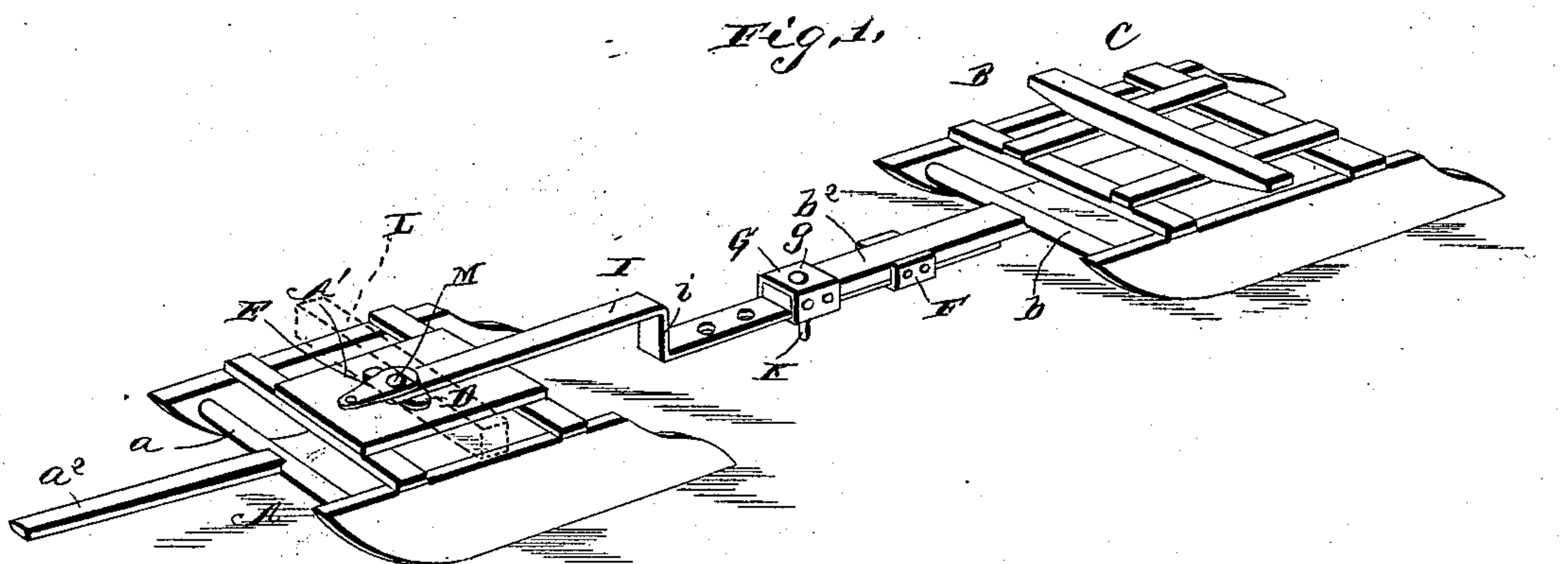
(No Model.)

F. L. BEARD.

BOB SLED.

No. 376,227.

Patented Jan. 10, 1888.



Witnesses

O. L. Taylor,  
C. E. Doyle

Inventor

F. L. Beard

By his Attorneys

C. A. Howland



# UNITED STATES PATENT OFFICE.

FRANCIS L. BEARD, OF PLEASANT RIDGE, KANSAS.

## BOB-SLED.

SPECIFICATION forming part of Letters Patent No. 376,227, dated January 10, 1888.

Application filed July 14, 1887. Serial No. 244,315. (No model.)

*To all whom it may concern:*

Be it known that I, FRANCIS L. BEARD, a citizen of the United States, residing at Pleasant Ridge, in the county of Leavenworth and State of Kansas, have invented a new and useful Improvement in Bob-Sleds, of which the following is a specification.

My invention relates to an improvement in bob-sleds; and it consists in certain novel features, fully set forth hereinafter, and specifically pointed out in the appended claim.

In the drawings, Figure 1 is a perspective view of the sled. Fig. 2 is a central longitudinal section thereof. Fig. 3 is a detail transverse section, *x x*, Fig. 2. Fig. 4 is a similar view, *y y*, Fig. 2.

Referring by letter to the drawings, A designates the front sled having the roller-bar *a* in the front end between the runners, to the center of which is secured the end of the tongue *a*<sup>2</sup> of the sled.

A' is a small platform supported between the said runners by suitable cross-bars.

B designates the rear sled, having the roller *b* pivoted between the front ends of the runners thereof, and to which is secured the tongue B<sup>2</sup>, and C designates the ordinary bench secured rigidly across the said sled in any suitable or preferred manner.

D designates a small bearing-plate secured to the upper side of the platform A', having an opening therein to align with the opening in the platform, and E designates a swinging plate pivoted at the front end to the said platform, and having an opening, *e*, in the rear end thereof to align with the openings in the plate D and the platform.

F designates a sleeve secured on the under side of the short tongue *b*<sup>2</sup>, near the center thereof, and G designates a sleeve secured to the underside of the end of the said tongue, and the said sleeve is extended up over the upper side of the said tongue to form the guard-plate *g*. The said plates and the sleeve on the under side are provided with perforations to align with each other and with the perforation in the end of the said tongue.

I designates the connecting-bar between the sleds, which is provided at the front end with a perforation to align with the perforations in

the bearing-plate and in the rear end of the swinging plate E when the front end of the said bar is placed between the said swinging plate and the bearing-plate. The said connecting-bar is bent downwardly in rear of the front sled, and the rear end thereof is passed through the sleeves F and G on the under side of the tongue. A series of perforations are formed in the said rear end of the connecting-bar to align with the perforations in the sleeve G and the plate *g* on the upper side of the tongue, and through any one of the said perforations and the perforations in the said sleeve and plate is passed the bolt K, to secure the tongue *b*<sup>2</sup> to the said connecting-bar.

L designates a bench having a central perforation therein, and through the said perforation and the perforations in the swinging plate E the front end of the connecting-bar, and the bearing-plate D is passed the king-bolt M, to pivot the said bench to the front sled, and also to pivot the front end of the connecting-bar to the front sled.

It will readily be seen that by passing the bolt K through different perforations in the connecting-bar any desired length may be had to the sled, and it is often of advantage to be able to alter the said length. The angle *i* in the said connecting-bar, where it is bent downwardly at the rear end of the front sled, is in such a position that the rear end of the front sled in turning will pass under the said bar. Thus the said bob-sled, constructed as herein described, may be turned within its length, this also being a great advantage.

By using the swinging plate E, herein described, to pass over the front end of the connecting-bar while the latter rests on the bearing-plate D, the king-bolt is relieved of all strain, and the parts are so constructed and arranged as to be easily detached when it is necessary to repair or alter the sled.

It will be seen that the tongue *b*<sup>2</sup> is very short, being only designed to enable the sleeves F and G to be placed far enough apart to properly brace the connecting-bar. There is ample vertical play of the parts of the sled allowed to enable the same to pass over very rough ground without straining or otherwise damaging any of the said parts.

Having thus described my invention, I claim—

5 The combination, with the rear sled and the connecting-bar I, adjustably attached thereto, and having a perforation in the front end, of the front sled having the platform A', provided with a perforation, the bearing-plate D, secured on said platform, and having a perforation to align with that in the platform, the  
10 swinging plate E, pivoted to the platform, and having a perforation in its free end, the front end of the connecting-bar I being adapted to be disposed between the bearing-plate D and

the swinging plate E, with the perforation therein aligned with the perforations in the said plates, and the bolt M, passing through the said aligned perforations, substantially as and for the purpose hereinbefore specified.

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

FRANCIS L. BEARD.

Witnesses:

T. C. BEARD,  
W. W. BLACK.