(No Model.)

L. WILEY.

BOB SLED.

No. 589,057. Patented Aug. 31, 1897.

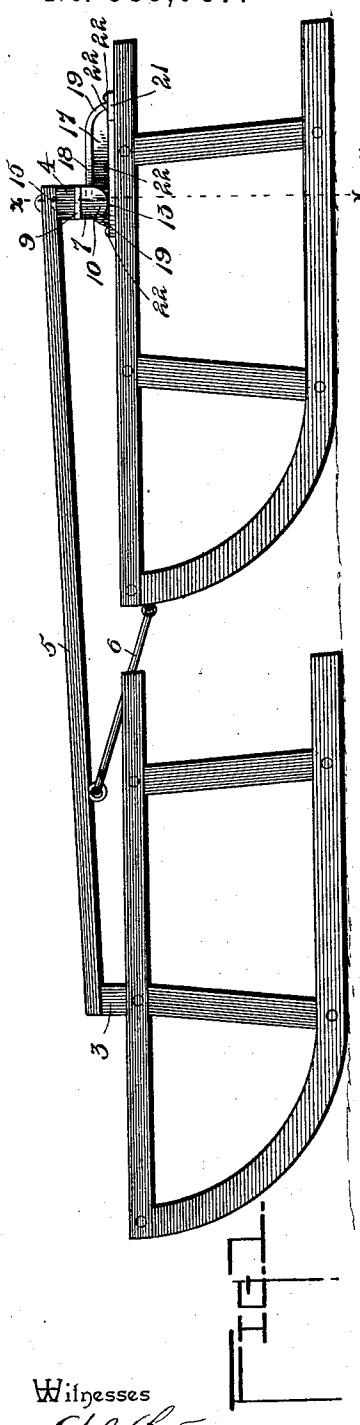


FIG. 1.

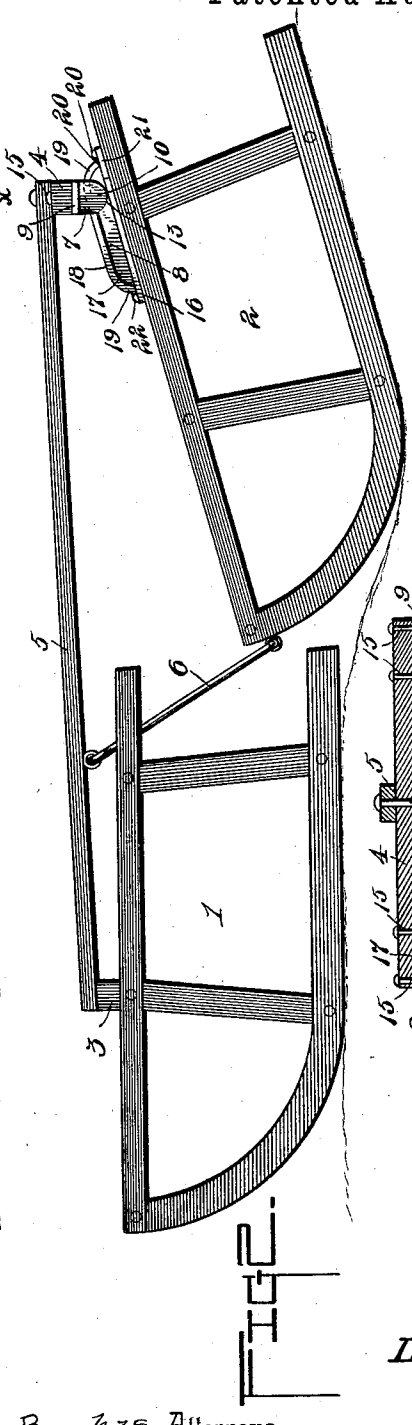


FIG. 2.

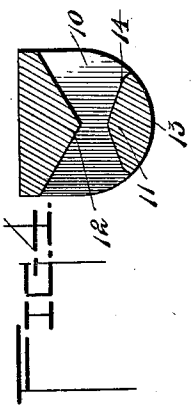


FIG. 4.

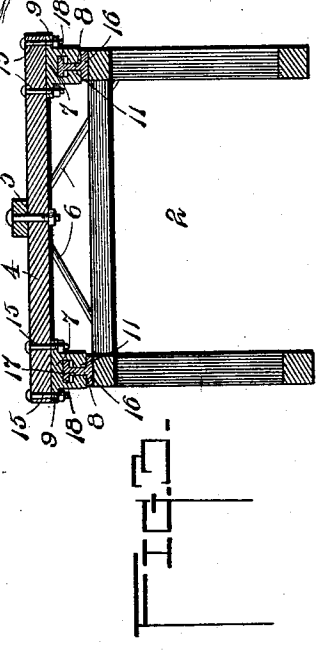


FIG. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

LEWIS WILEY, OF WESTMORELAND, NEW YORK.

BOB-SLED.

SPECIFICATION forming part of Letters Patent No. 589,057, dated August 31, 1897.

Application filed February 19, 1897. Serial No. 624,155. (No model.)

To all whom it may concern:

Be it known that I, LEWIS WILEY, a citizen of the United States, residing at Westmoreland, in the county of Oneida and State of New York, have invented a new and useful Bob-Sled, of which the following is a specification.

This invention relates to bob-sleds, its object being to provide a coupling by means of which the rear bolster and the runners of the rear sled are connected together in such manner that there may be a rocking movement and also a longitudinal movement between them for the purpose of preventing strain or breakage when the sled is moved over rough and uneven surfaces.

With the above end in view my invention consists in the several details of construction and combination of parts hereinafter fully described, and particularly pointed out in the claim.

In the drawings, Figure 1 is a side elevation of the bob-sled embodying my invention, the parts being in the position they occupy when the sled is running on practically level ground. Fig. 2 is a similar view showing the position of the parts when the rear sled is in a hollow or dip. Fig. 3 is a vertical transverse section on the line *x x* of Fig. 1. Fig. 4 is a vertical transverse section through the part of the coupling attached to the bolster.

Similar reference-numerals indicate similar parts in the several figures.

1 and 2 represent the front and rear sleds, respectively, and 3 and 4 their respective bolsters. The front bolster is secured to the front sled in any desirable manner, and the two bolsters are connected together by the reach 5 by means of bolts or other suitable securing devices.

6 represents a V-shaped iron connecting the front ends of the runners of the rear sled to the reach in the ordinary manner.

The rear bolster 4 is connected to the rear sled 2 by means of my improved couplings, one of these couplings being used for each runner. The coupling consists of two members, (indicated by 7 and 8, respectively.) The member 7, which is attached to the bolster, consists of the plate portion 9, the depending spaced ears 10, and the inwardly-projecting lugs 11 at the lower end of the ears. The lower face of the plate portion 9 between the ears is thickened and reversely inclined from its central portion to its edges, thereby forming practically a downwardly-projecting V-shaped portion between the two ears, as indicated by 12. The lower ends of the ears are curved, as indicated at 13, and the lower faces of the lugs 11 are correspondingly curved and are in alinement with the lower end of the ears. The upper faces of the lugs 11 are also curved, as indicated at 14, but in a reverse direction to their lower faces. The plate portion 9 is securely fastened to the bolster 4 by means of bolts 15 or other suitable securing devices.

The member 8 of the coupling consists of the plate portion 16 and the cross-sectionally-T-shaped part 17, extending vertically from the plate. The flanges 18 of the part 17 and the plate 16 form guides between which the inwardly-projecting lugs 11 of the member 7 of the coupling are adapted to fit to slide freely therein, and the lower ends of the ears 10 will rest upon the plate 16, and on account of the curvature of these ends and the reversely-curved upper faces of the lugs 11 the member 7 will be enabled to rock freely on the member 8. The ends of the flanges 18 are curved downwardly, as indicated at 19, toward the plate, and form stops to limit the sliding movement of the member 7 on the member 8 of the coupling. One end of the T-shaped part 17 extends beyond the plate portion 16, in order that an opening 20 may be formed to permit the inwardly-projecting lugs 11 to enter between the flanges 18 and the plate portion 16, and when the parts are attached to the sled a metal plate 21, corresponding in thickness and width to the plate 16, may be inserted between the projecting end of the T-shaped part 17 and the runner of the sled, in order to entirely close the opening 20. The plate 16 is secured to the runner by bolts 22 or other suitable securing devices.

When the sled is on practically level ground, as indicated in Fig. 1, the member 7 of the coupling will be at the forward end of the member 8 and the upper faces of the two parts will be in substantially parallel planes, and the apex of the V-shaped portion 12 between the ears 11 will rest on the top surface of the T-shaped portion 17. When, however, the front

end of the sled is depressed on entering a dip in the road, the member 7 of the coupling will be moved to the rear end of the member 8 and the two parts will rock relatively to each other, as indicated in Fig. 2. This rocking and longitudinal movement will relieve the parts from any strain and effectually prevent breakage. As the sled moves out of the dip or depression in the road the parts of the coupling will again gradually assume their normal position.

It will be understood that changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim is—

A coupling for the runner and bolster of a sled, consisting of two members adapted to be secured to the runner and bolster respectively, the runner member consisting of a plate formed in two sections and an upwardly-extending cross-sectionally-T-shaped portion integral with one of the plate-sections and projecting at one end therefrom to extend over the other plate-section, and the horizontal flanges of the T-shaped portion being curved downwardly at each end, the said plate-sections and horizontal flanges forming ways closed at each end, and the bolster member having spaced depending ears provided with inwardly-projecting lugs to enter the ways in the runner member, and a V-shaped portion between the ears to engage the upper face of the runner member, and the plate-section which is separate from the T-shaped portion being independently removable to permit the lugs to be entered in or withdrawn from the ways, substantially as described.

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

LEWIS WILEY.

Witnesses:
THOS. A. YATES,
BENJN. S. BROWN.