

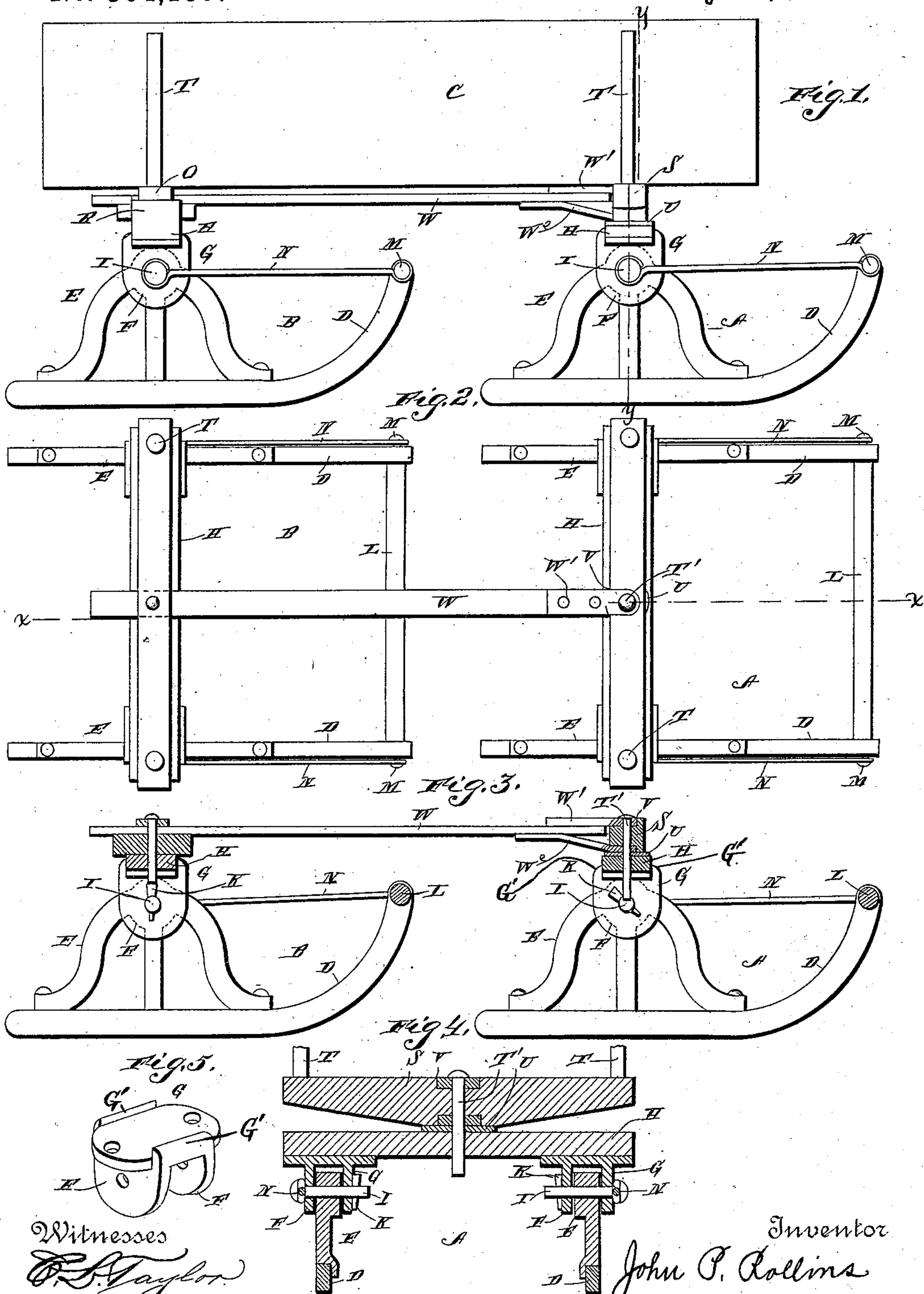
(No Model.)

J. P. ROLLINS.

BOB SLED.

No. 364,137.

Patented May 31, 1887.



Witnesses

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BOB-SLED.

SPECIFICATION forming part of Letters Patent No. 364,137, dated May 31, 1887.

Application filed March 16, 1887. Serial No. 231,180. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. ROLLINS, a citizen of the United States, residing at Cedar Rapids, in the county of Linn and State of Iowa, 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 the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation of a bob-sled embodying my improvements. Fig. 2 is a top plan view of the same with the body of the sled removed. Fig. 3 is a vertical longitudinal sectional view taken on the line *x x* of Fig. 2. Fig. 4 is a vertical transverse sectional view taken on the line *y y* of Fig. 1. Fig. 5 is a detail view.

A represents the front bob. B represents the rear bob, and C represents the body of the sled. Each of the bobs comprises a pair of runners, D, provided on their upper sides, near their rear ends, with vertical standards E, which are pivoted between the depending ears F of brackets G, which are secured to the under sides of the cross-beams H, near the ends thereof. The said brackets G are provided with vertical upwardly-projecting side flanges, G', which bear against the front and rear sides of the cross-beams, and thereby seat the latter on the brackets. The pivotal bolts I, which connect the standards to the brackets, have their heads projecting outwardly beyond the said brackets for a slight distance, and the inner ends of the said pivotal bolts are prevented from being accidentally displaced by means of linchpins K.

The front ends of the runners are loosely connected together by means of a cross-bar, L, the ends of which are provided with projecting headed spindles M, that extend through the transverse openings at the front upper ends of the runners. The said transverse openings are enough larger than the spindles to permit the latter to play freely therein in a vertical direction, and thus the front ends of the runners are flexibly connected together, and each runner is free to move in a vertical direction independently of the other, thus accommodating the sled to inequalities of the

ground, and consequently relieving the running-gear and the body (in a great measure) of side strain. Brace-rods N connect the outer ends of the spindles M with the outer ends of the pivotal bolts I, as shown.

On the upper side of the cross-beam H of the rear bob is secured a bolster, O, provided with the usual standards, T, which bear against the sides of the rear portion of the bed or body. The said bolster is supported at a slight distance above the cross-beam by means of blocks R.

S represents the front bolster, which is pivoted to the center of the cross-beam of the front bob by means of a king-bolt, T', in the usual manner. On the under side of the front bolster is secured a wear-plate, U, and on the upper and lower sides of the bolster, at the center thereof, are made transverse recesses V.

W represents the reach, the rear end of which is secured in a transverse opening made in the under side of the rear bolster at the center thereof. The front end of the reach is provided on its lower side with a forward-projecting metallic arm, W', the front end of which enters the recess under the center of the front bolster, and on the upper side of the said reach is a forward and upward extending brace-arm, W², having its front end bearing in the upper recess on the front bolster. In the front ends of the arms W' and W² are made vertical aligned openings, which register with the central opening in the front bolster and in the cross-beam of the front bar to receive the king-bolt.

Having thus described my invention, I claim—

1. In a bob-sled, the combination of the cross-beam H, the brackets G, secured to the under side of the cross-beam and having the depending ears F, the runners having the vertical standards pivoted between the ears F, thereby pivoting the runners independently to the cross-beam, and the cross-bar L, having the projecting headed spindles M at its ends, extending through transverse openings at the front upper ends of the runners, thereby flexibly connecting the front ends of the runners together, substantially as described.

2. In a bob-sled, the combination of the cross-beam H, the brackets G on the under side of the cross-beam, near the ends thereof,

