(No Model.)

H. McILROY.

BOB SLEIGH.

No. 257,358. Patented May 2, 1882.

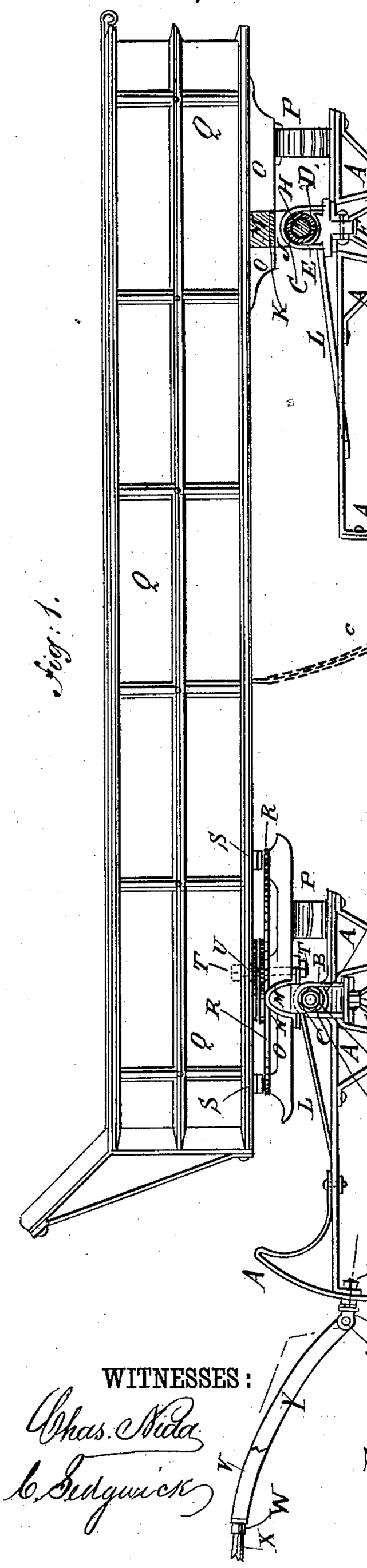

Fig: 1.

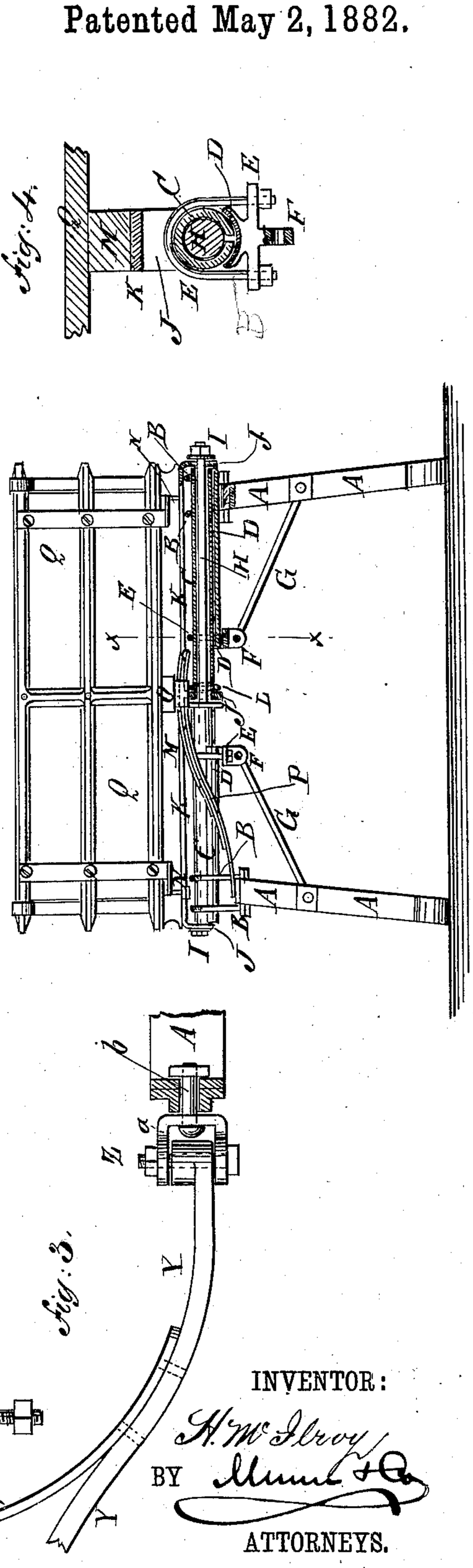

Fig: 2.

Fig: 4.

Fig: 3.

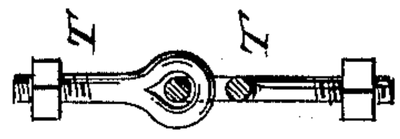

Fig: 5

WITNESSES:

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HIRAM McILROY, OF POPLAR RIDGE, NEW YORK.

BOB-SLEIGH.

SPECIFICATION forming part of Letters Patent No. 257,358, dated May 2, 1882.

Application filed October 27, 1881. (No model.)

To all whom it may concern:

Be it known that I, HIRAM MCILROY, of Poplar Ridge, in the county of Cayuga and State of New York, have invented a new and useful Improvement in Bob-Sleighs, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation, partly in section, of my improvement. Fig. 2 is a rear elevation of the same, partly in section. Fig. 3 is a plan view, partly in section, of the coupling for connecting the tongue and runners. Fig. 4 is a sectional elevation of a part of the improvement, taken through the line *x x*, Fig. 2. Fig. 5 is an elevation of the king-bolt, partly in section.

The object of this invention is to allow the runners of bob-sleighs to adapt themselves to an uneven roadway without straining the connections of the sleighs.

The invention consists in the combination, with the bolsters and the runners, of tubes clipped to the runners, rods passing through the tubes, and plates attached to the bolsters, and having lugs projecting at the ends of the tubes and perforated to receive the rods, whereby the runners can move independently of each other in passing over an uneven roadway; also, in the combination, with the runners, the tubes, and the rods, of concaved bars placed beneath the tubes and secured to them by clips and braces, whereby the runners are held firmly in place; and also, in the combination, with blocks attached to the bolsters and the runners, of springs, whereby the flat surfaces of the runners are kept in contact with the roadway, as will be hereinafter fully described.

A are the runners, each of which is secured by clips B to the outer end of a tube, C. Between the tube C and the rave of the runner A, or a bearing-block attached to the said rave, is interposed a bar, D, which is concaved upon the upper side to fit against the lower side of the said tube C. The concaved bar D extends nearly to the inner end of the tube C, and its inner end is secured to the said tube C by a clip, E. The yoke of the clip E has a lug, F, formed upon its lower side, to which are secured by bolts or rivets the inner ends of two braces, G. The outer ends of the braces G are secured to the knees or braces of the runner. The tubes C of each bob are placed in line with each other and have a rod, H, passed through them, which is secured in place by nuts I, screwed upon its ends. The rod H also passes through three lugs, J, formed upon the lower side of the plate K in such positions that the center lug J will be between the inner ends of the two tubes C and the outer lugs J will rest against the outer end of the said tubes C. The rod H is further strengthened in position by the braces L, the inner ends of which have eyes formed in them to receive the said rod H and are interposed between the center lug J and the ends of the tubes C. The outer ends of the braces L are secured to the forward parts of the raves of the runners H.

The plates K are secured to the bolsters M by clips or U-bolts N, and to the centers of the said bolsters M are attached blocks O, which are placed at right angles with the said bolsters.

To the rear ends of the blocks O are attached the centers of half-elliptic springs P, the ends of which rest upon the upper sides of the rear ends of the raves of the runners A to keep the flat surfaces of the said runners upon the roadway and prevent the said runners from sliding upon their curved forward parts. The rear block O and the rear bolster M are firmly attached to the sleigh-body Q. To the forward block O and the forward bolster M is attached the fifth-wheel R, upon the forward and rear parts of which rest bearing-blocks S, attached to the bottom of the sleigh-body Q in front and rear of the king-bolt T.

To the bottom of the sleigh-body Q, upon the opposite sides of the king-bolt T, are attached blocks U, of a less height than the blocks S, to receive the wear when the forward bob rocks, and would bring the fifth-wheel R in contact with the bottom of the sleigh-body Q. With this construction each runner moves independently of the others, so that the sleigh can readily adjust itself to the surface of an uneven roadway.

V is a curved cross-bar, to the center of the convex side of which is attached or upon it is formed a socket, W, to receive the rear end of

the tongue X. The ends of the curved cross-bar V are attached to the draw-bars Y near their rear ends. The forward ends of the draw-bars Y are attached to the opposite sides of the tongue X at a little distance from its rear end. In the rear ends of the draw-bars Y are formed eyes to receive the bolts Z, which also pass through holes in the ends of the bows *a*. The bows *a* are swiveled to bolts *b*, which pass through the forward parts of the runners A and are secured in place by nuts screwed upon them. The bolts Z *b* and the bows *a* thus form swivel-couplings and prevent the connections between the tongue and sleigh from being broken or injured by the movements of the forward runners. The forward ends of the rear runners A are connected with the sleigh-body Q by slack chains *c*, to prevent the said runners from turning too far back.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a bob-sleigh, the combination, with the bolster M and the runners A, of the tubes C, the rods H, and the plates K, having lugs J, substantially as herein shown and described, whereby the runners can move independently of each other in passing over an uneven roadway, as set forth.

2. In a bob-sleigh, the combination, with the runners A, the tubes C, and the rods H, of the concaved bars D, the clips E, having lugs F, and the braces G L, substantially as herein shown and described, whereby the runners are held firmly in place, as set forth.

3. In a bob-sleigh, the combination, with the body Q, the bolster M, and the runners hinged to the said bolster, of the springs P, interposed between the said body and runners, with their ends resting upon the upper sides of the raves of the runners, substantially as shown and described, whereby the flat surfaces of the runners will be kept upon the roadway, as set forth.

HIRAM McILROY.

Witnesses:
HENRY WHEELER,
W. T. MOSHER.