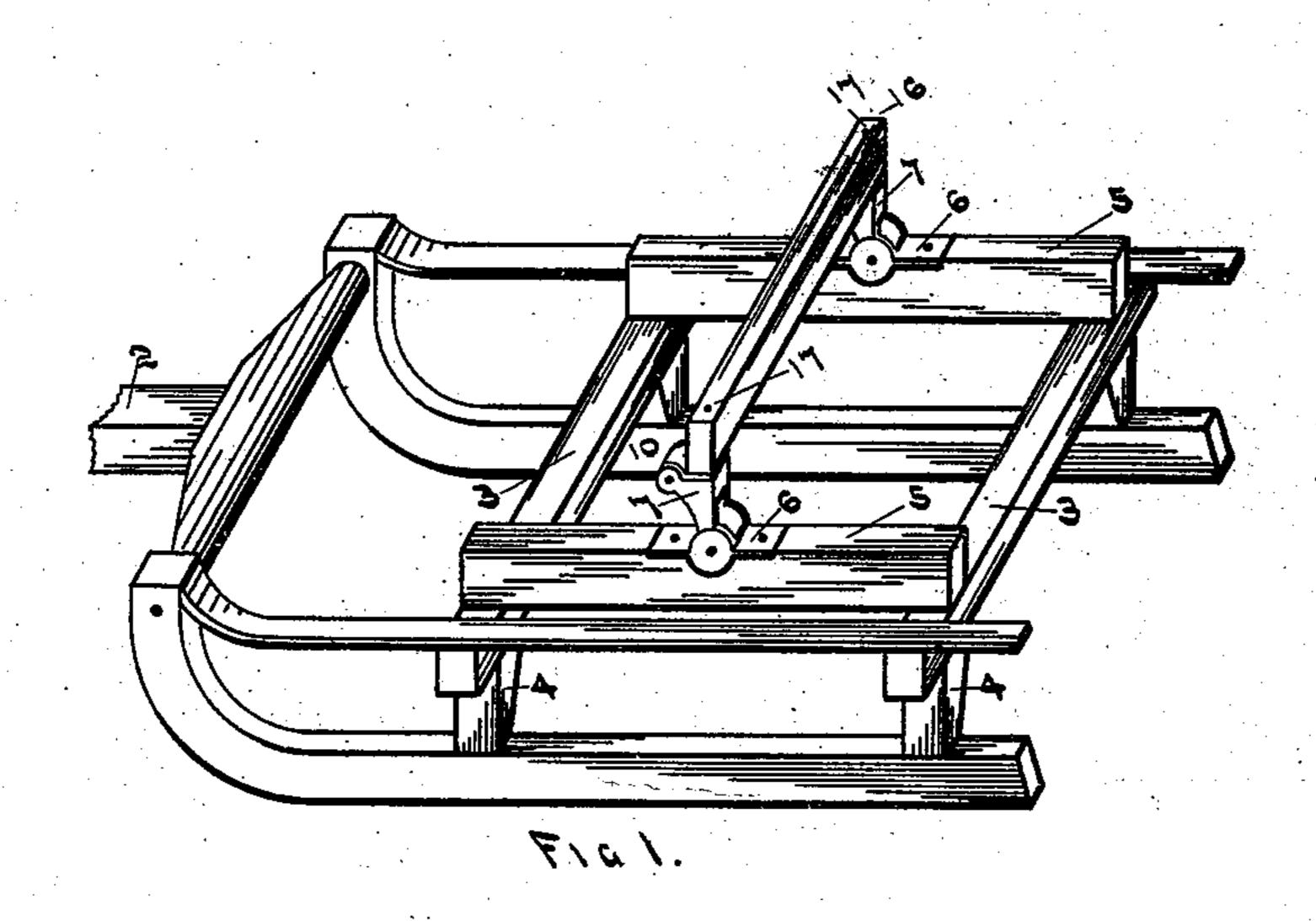
(No Model.)

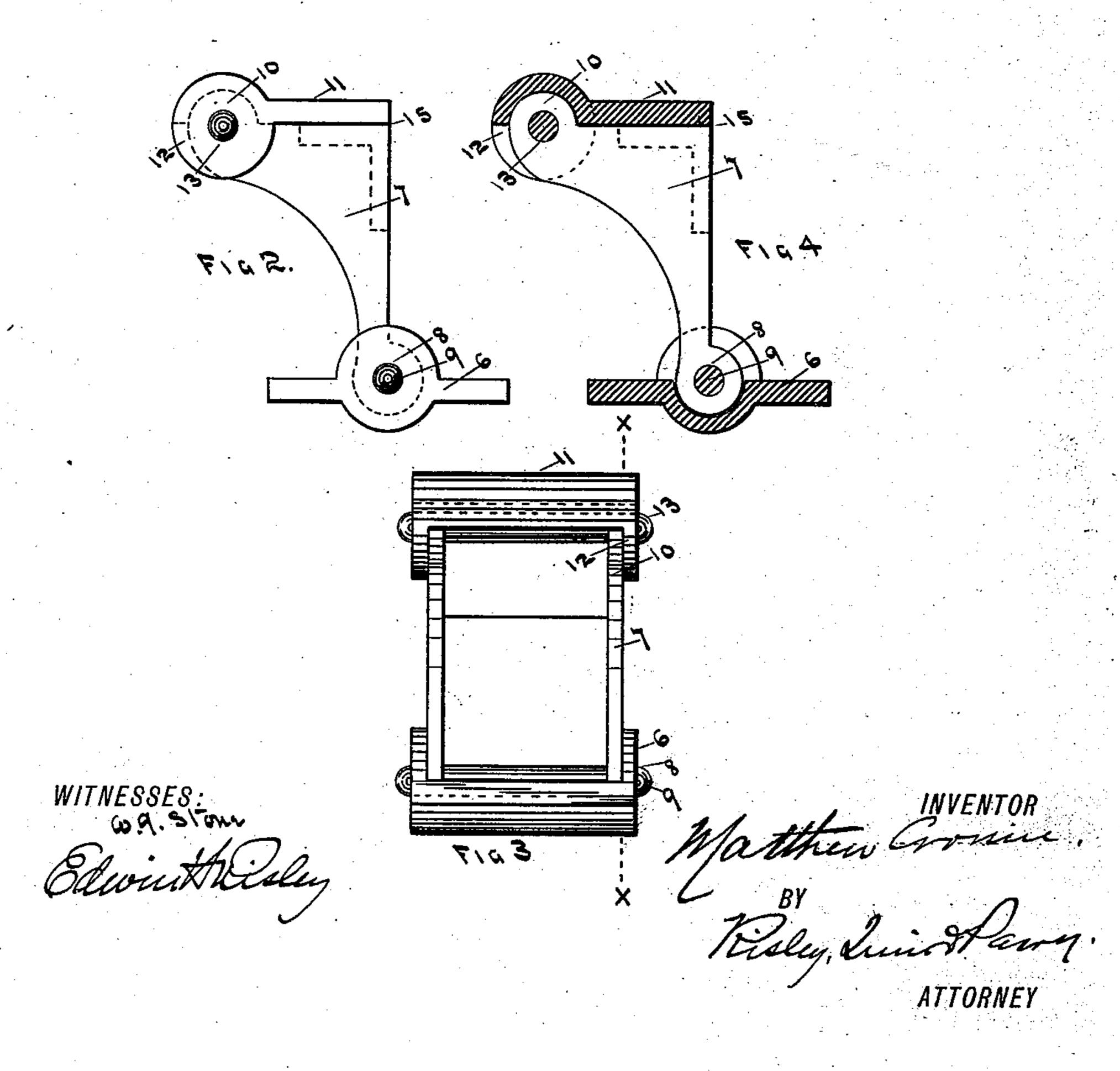
## M. CRONIN.

COUPLER FOR BOB SLEDS.

No. 377,739.

Patented Feb. 14, 1888.





## United States Patent Office.

MATTHEW CRONIN, OF WESTMORELAND, NEW YORK.

## COUPLER FOR BOB-SLEDS.

SPECIFICATION forming part of Letters Patent No. 377,739, dated February 14, 1888.

Application filed February 19, 1887. Serial No. 228,165. (No model.)

To all whom it may concern:

Be it known that I, MATTHEW CRONIN, of Westmoreland, in the county of Oneida and State of New York, have invented certain new 5 and useful Improvements in Jointed Couplers for Bob-Sleighs; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to an improvement in the means for supporting a bolster on the hind bob of a sleigh; and it consists in the mechanism hereinafter pointed out and claimed.

In the accompanying drawings, Figure 1 represents a perspective view of the hind bob 2c in a sleigh. Fig. 2 is a side view of my jointed coupling. Fig. 3 is a front view of the same; and Fig. 4 is a side view on line x x, Fig. 3.

Heretofore various devices have been used to accommodate the movement of the hind 25 bob where a reach is used and connects the hind bob to the front. When no provision is made for accommodating the inequality of distance between the front and hind bob, caused by their up and down movement in 30 passing over uneven surfaces, the strain upon the bolster is very great, tending to move it backward or forward under the box or tip it over. To relieve this trouble I provide a system of double-jointed couplings, which allows 35 the free horizontal movement of the hind bob, caused by passing over uneven surfaces without strain upon the bolster. When the hind bob is drawn over an even surface, the load rests on the flat surface of the sockets and con-40 necting-link.

In the drawings, figure 1 represents a bob of ordinary construction. 2 represents the reach, connected with the hind bob. 3 3 represent the beam, mounted on knees 44 on either run45 ner. On the beams I mount bolster-beams 55, crosswise of the beams. On these bolster-beams I mount socket-plates 6, which are rigidly held thereto by bolts or rivets. With the socket-plates I use links 77, the lower end being constructed to fit in socket-plate, the lower end of the link being perforated at 8 for receiving retaining-bolt 9, which forms a jointed coupling at this point, which leaves the upper end of the link free to move. On

the upper end of link 7, I provide perforated 55 ears 10 10. The perforations are preferably made oblong in vertical shape, to allow the upper socket-plate to be more readily lifted off its seat, which fits into socket-plate 11 11, having perforated ears 12 12, the link and 60 socket-plate being connected at this point with bolt 13. The rear of this socket-plate when in its normal condition rests on shoulder 15 on the upper end of the link, forming a rest for carrying the load. On the upper 65 surface of the upper socket - plate I mount bolster 16, which is held thereto by bolts 17 17. To this bolster the box or bottom of the sleigh-box is attached. As the hind bob rises and falls upon the uneven surface of the high- 70 way, the forward or backward movement thereby produced is accommodated by the jointed coupling constructed substantially as described.

I am aware that the bolster has been ap- 75 plied to bobs by attaching the bolster to a single crank arm; but I am not aware that a double-jointed system of connections has been used by which the load, when resting in its normal place on the bolster, is supported 80 by a shoulder on which the load is carried when the bobs are running on an even surface, the coupling being so connected that when the bobs pass over uneven ground the bolster and part of the coupling is free to 85 move to accommodate the unequal distance traveled by the two bobs.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in bobs, of the upper 90 plate secured to the bolster, the lower socket-plate secured to the bobs, and the coupling-link jointed at the front and in the rear to the upper and lower socket-plates, substantially as set forth, for the purposes stated.

2. The combination, in bobs, of the upper and lower socket plates joined to the opposite ends of the connecting-link, the upper end of the link being provided with a shoulder forming a rest when the bobs are moving on even 100 or smooth surfaces, substantially as set forth.

In witness whereof I have affixed my signature in presence of two witnesses.

## MATTHEW CRONIN.

Witnesses:
EDWIN H. RISLEY,
D. McGucken.