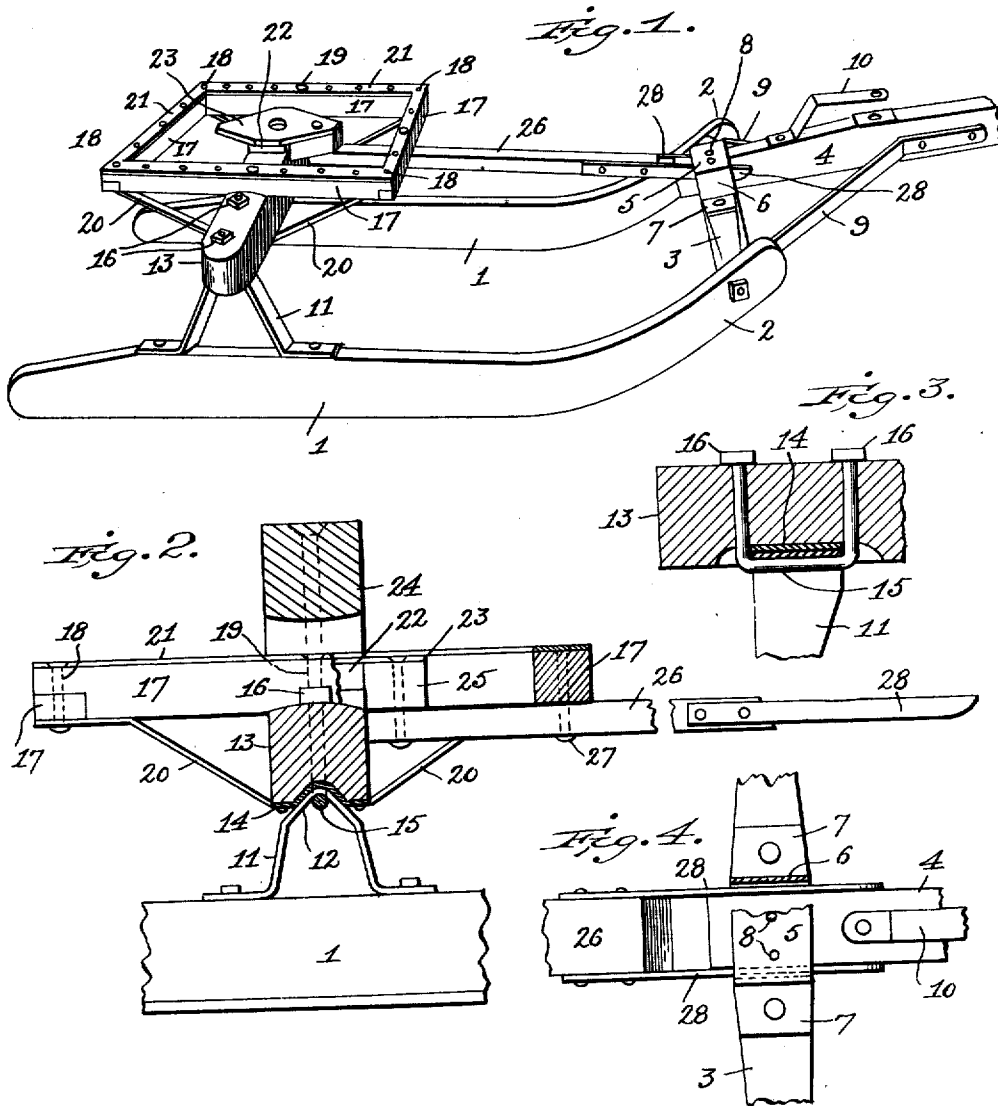


N. HALVORSEN.
BOB SLED.
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1,012,544.

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Witnesses
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UNITED STATES PATENT OFFICE.

NELS HALVORSEN, OF EDGERTON, WISCONSIN.

BOB-SLED.

1,012,544.

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To all whom it may concern:

Be it known that I, NELS HALVORSEN, a citizen of the United States, residing at Edgerton, in the county of Rock and State of Wisconsin, have invented new and useful Improvements in Bob-Sleds, of which the following is a specification.

This invention relates to bob sleds, and its object is to provide an improved construction of the hound for the front bob, and also provide means for limiting the oscillations of the beam, and thereby preventing it from being split by tripping backward when under load.

In the accompanying drawing, Figure 1 is a perspective view of my improved bob sled. Fig. 2 is a side elevation of a portion of the same, showing the knee in section. Fig. 3 is a transverse section of the joint at the knee, and Fig. 4 is a top plan view, partly broken away of the connection between the balancing bar and the roller to which the pole is fastened.

The sled comprises two runners 1 having the upwardly curved front ends 2 in which is journaled the roller 3 to which the heel of the pole 4 is fastened. This end of the pole rests upon the roller, and is secured thereto by a strap 5 of metal which passes over the pole and has downwardly bent ends 6 provided with flanges 7 bolted to the roller. One or more bolts 8 pass through the upper part of the strap and the pole. Braces 9 extend diagonally from the sides of the pole to the ends of the roller. A clevis 10 on top of the pole affords means for attaching the whiffletree. A knee 11 is erected on each runner consisting of an inverted U-shaped metal strip having a rounded upper end 12 which fits into a recess in the under side of the beam 13. A metal wear plate 14 protects the beam, and the parts are kept in engagement by a U-shaped clip 15 which passes through the bight of the knee and up through the beam, being secured by the nuts 16. On the upper side of the beam is placed the hound, composed of four straight bars 17 with their meeting ends mortised or otherwise jointed together and secured by bolts 18 to form a square-cornered frame. A bolt 19 at the middle of the two side bars passes through the beam and fastens the hound thereto. The side bars are furthermore provided with braces consisting of straps of metal 20 which run down under the beam and are secured

thereto, preferably by the bolts 19. The upper faces of the bars 17 are provided with metal facings or wear strips 21.

At the center of the beam is a block 22 carrying the metal bolster plate 23, on which rests the bolster 24. A king bolt runs down through the bolster and bolster plate and beam, and permits the bolster to swivel thereon, as usual. The bolster plate extends in front of and behind the block 22, and under the front extension is secured the block 25. The balancing bar 26 is fastened to the under side of the block 25 and runs forward under the front cross bar 17 of the hounds, to which it is also secured by the bolt 27. The forward end of the balancing bar is provided with one or more tongues 28, preferably two in number, one on each side. These project forward into loops on the roller, preferably formed by spaces left for them between the sides of the pole and the side portions 6 of the strap 5, which do not fit against the sides of the pole, but stand a little away from it, as shown in Fig. 4. There is play enough between the tongues and the strap to permit the pole to pivot freely on the journals of the roller, but the balancing bar is limited in its up and down movements sufficiently to keep the beam always substantially level. This prevents it from being tipped over backward by a heavy load, and thus prevents the king bolt from bending or splitting the beam or bolster. A source of frequent trouble is thus entirely done away with.

The square-cornered hound is cheap and simple in construction and by my construction it is quite as strong and serviceable as those heretofore made of bent pieces.

While I have shown and described the balancing bar in connection with a square hound, yet it is evident that the shape of the hound is immaterial, and that the balancing bar can be used equally well with a hound that is circular, or of any desired shape.

Having thus described my invention, what I claim is:—

1. The combination with the pole and the beam of a bob sled, of a hound composed of straight side bars resting on said beam, cross bars jointed to the ends of said bars, braces running from the ends of said bars down under said beam, through bolts fastening said side bars, beam and braces to-

gether a bolster plate secured to said beam, and a balancing bar connected with the under side of said plate and the under side of the front cross bar, and adapted to engage 5 loosely with the heel of the pole. 15

2. The combination with a bob sled having a bolster plate, a hound and a roller, of a balancing bar secured to said bolster plate and hound and provided at its front 10 end with one or more tongues; a pole fastened to said roller, and a strap passing over said pole bent downwardly on each

side thereof and secured to the roller forming loops at each side of the pole in which said tongues can engage with a certain amount of vertical play.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

NELS HALVORSEN.

Witnesses:

VIOLETTE TREVOWAH,
ADA HALVORSEN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."