## W. C. PIERCE. SLEIGH.

APPLICATION FILED APR. 30, 1903. NO MODEL. Duventor Witnesser C.S. Frys. Hubert & Just Walter C. Pierce, 

## United States Patent Office.

WALTER CLARENCE PIERCE, OF WAUKON, IOWA.

## SLEIGH.

SPECIFICATION forming part of Letters Patent No. 736,543, dated August 18, 1903.

Application filed April 30, 1903. Serial No. 155,049. (No model.)

To all whom it may concern:

Be it known that I, Walter Clarence Pierce, a citizen of the United States, residing at Waukon, in the county of Allamakee and State of Iowa, have invented certain new and useful Improvements in Sleighs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in sleighs, and especially to that class known as "bob-sleds;" and my object is to provide a mechanism whereby the front bob may be turned at any angle to the remainder of the sleigh and the load prevented from tipping to either side when the bob is so turned.

Other objects and advantages will be made clearly apparent from the following specification, considered in connection with the accompanying drawings, which are made a part of this application, and in which—

Figure 1 is a perspective view of a front bob of a sleigh with my improvement attached thereto. Fig. 2 is a top or plan view thereof. Fig. 3 is a sectional view thereof as seen from the dotted line x x in Fig. 2, and Fig. 4 is a detail sectional view as seen from the dotted line y y in Fig. 2.

Referring to the drawings, in which similar reference characters designate similar parts of my invention throughout, 1 indicates the runners of a bob-sleigh, which may be of any preferred or well-known construction. The front ends of the runners 1 are provided with the usual cross-bar or roller 2, to which is attached the tongue 3. Near the opposite ends of the runners 1 I mount suitable supporting-standards 4, to the upper end of which I pivotally mount the auxiliary bolster 5. Bolted or otherwise secured to the said auxiliary bolster is a circular trackway or support 6, said trackway being provided with a guide or flange 7 around its outer edge.

Mounted upon the auxiliary bolster 5 and secured in place by the usual form of kingbolt or the like is the bolster proper, 8, said bolster being provided upon its lower edge in suitable bearings with trunnions 9, said trunson nions being so located as to register with the

trackway 6 and rest thereon.

By referring more particularly to Fig. 3 of the drawings it will be seen that when the sleigh is traveling in a straight course the bolster 8 will register with the auxiliary 55 bolster 5, in which case the said bolster 8 will be held normally level even should more weight be upon one side of the bolster than upon the other; but should the front bob be turned at right angles to the load the auxil- 60 iary bolster 5 is also turned at right angles to the bolster 8, in which case the trunnions 9 will rest at diametrically opposite points upon the trackway 6, and if said trackway is not braced it is liable to tip to that side upon 65 which the most weight rests, thus permitting the load to become overbalanced and upset, and to this end I provide a clevis-like brace member 10, the free ends of said member 10 being pivotally mounted in ears 10<sup>a</sup>, carried 70 by the auxiliary clevises 11. The auxiliary clevises are in turn secured to the runners 1 by means of the bolts or pins 12. The upper central portion of the clevis 10 passes through an elongated slot 13 in the keeper 14, said 75 keeper being in turn rigidly secured to the face of the flange 7. By this means the trackway 6 and auxiliary bolster 5 are held practically level regardless of how much weight is thrown upon one side of the bolster 8. 80 The object in having the keeper 14 provided with the elongated slot 13 is to permit the natural oscillation of the runners 1 without in any manner disturbing the plane of the trackway 6. It will therefore be seen that 85 the bolster and load carried thereby will be positively reinforced and supported, thus permitting the sled to be turned freely in any direction. It will further be seen that by having the member 10 pivotally secured to 90 the auxiliary clevises 11 the runners may yield to any unevenness of the ground without disturbing the plane of the trackway 6.

While I have described the preferred construction which may be adopted in carrying 95 out my invention, it will be understood that I desire to comprehend in this application all such equivalents and substitutes as may be considered to fall within the scope of my invention, and I do not, therefore, wish to be roo confined strictly to the exact showing herein

made.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

As an improvement in bob-sleighs, the combination with suitable runners, and a bolstersupport provided therefor, of a circular trackway mounted upon said support; a keeper secured to the face of said trackway, said keeper being provided with an elongated slot; to a clevis-like member taking through the slot

in said keeper and means for securing said clevis to the runners substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WALTER CLARENCE PIERCE.

Witnesses:

A. G. STEWART, W. B. COWAN.