(No Model.)

A. TURNER.

SLED.

No. 301,777. Patented July 8, 1884.

Fig. 1.

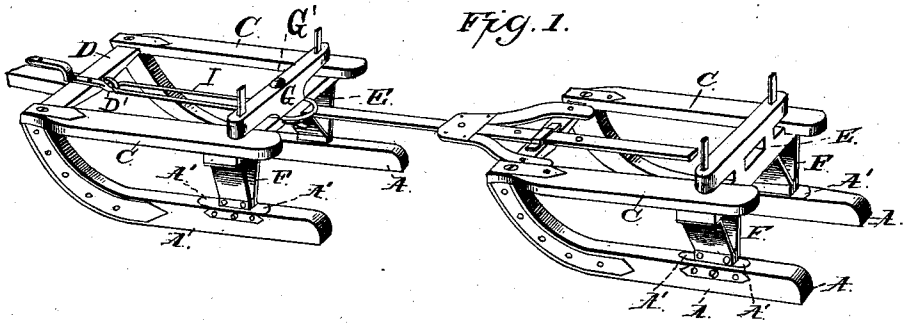


Fig. 2.

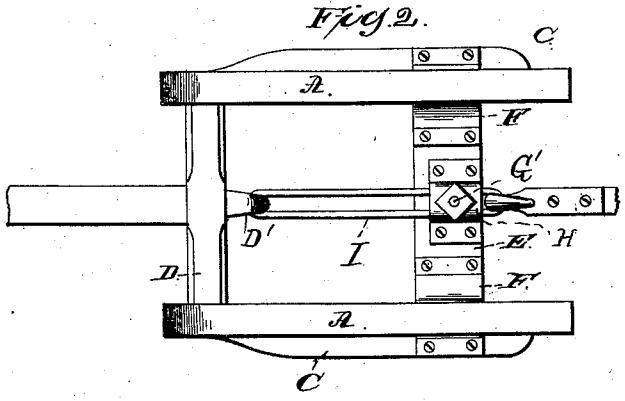


Fig. 3.

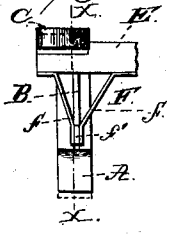
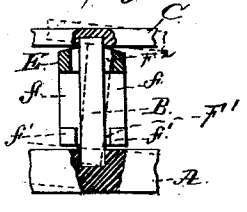


Fig. 4.



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UNITED STATES PATENT OFFICE.

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SLED.

SPECIFICATION forming part of Letters Patent No. 301,777, dated July 8, 1884.

Application filed January 8, 1884. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER TURNER, a citizen of the United States, residing at Brandon, in the county of Fond du Lac and State of Wisconsin, have invented certain new and useful Improvements in Sleds; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in bob-sleds; and it consists in the novel construction, combination, and arrangements of the several parts, as hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of my sled. Fig. 2 is an inverted plan view of the front sled. Fig. 3 is an end elevation of one of the knees and standards. Fig. 4 is a detached sectional view on line *x x*, Fig. 3.

The runners A A are provided near their rear ends with the standards B, secured to the runners, and projecting vertically upward, as shown. These standards at their upper ends are made fast to the raves C, which extend forward, and are secured to the forward upturned ends of the runners A. The draft-bar D is journaled in and extends across between the runners near the front ends thereof. The beam E is provided near its opposite ends with knees F, which depend as shown. These knees are preferably made of wrought-iron plates *f f*, having their upper ends flared and bolted to the under side of the beam, and their lower ends brought close together and securely fastened and separated by blocks *f'*, between which the opening F' is formed. This opening F' is made slightly larger than the standard B, so as to permit the rocking motion presently described. An opening, F², is formed through the beam directly above the opening F', as most clearly shown in Fig. 4. The standard B projects through these openings, and the rave C rests on the upper side of the beam E. The ends of the beam on which the raves rest are rounded, as shown in Fig. 4. By the construction described it will be seen the beam on which the load is supported is capable of a slight rocking motion, as indicated in dotted lines, Fig. 4. This motion of the beam is desirable, as is well understood, while I prefer to construct the knee of wrought-iron, and, as before described, it is obvious that it might be made of cast-iron with the opening F' and secured to the beam; or it is obvious that instead of forming the opening F² through the beam said opening might be formed in the upper end of the knee and the latter secured to the end of the beam instead of the under side thereof, as will be readily understood. The weight of the load bearing on beam E is supported by the knees, which bear against the upper side of the runners A.

In order to protect the runners, I provide them around the base of standards B with a metallic plate, A', against which the knees bear, as shown in Fig. 1. The bolster G is pivoted centrally on pin G', which is passed down through the beam and extends below the latter through a boxing, H, secured on its under side. This boxing is made sufficiently large to permit the passage of the connecting-link I. This link I has its forward end held by hook D', secured to the rear side of bar D, and extends thence through boxing H, as most clearly shown in Fig. 2. The pin G' passes through the link, and should the latter become detached from hook D' will catch the forward end of the link and prevent the disconnection of the two sleds. This construction also enables the lengthening of the connection between the two sleds by detaching the link from hook D', and having it held by pin G', as above described. Ordinarily, however, I prefer to connect the link to hook D', as thereby the draft of the rear sled is removed from the forward sled and exerted on the draft-bar, thereby obviating the straining and racking of the front sled by the weight of the rear one, as in sleds of ordinary construction.

While I prefer to construct the link-connection of a metal rod and in the loop form shown, it is obvious that in lieu thereof a chain, rope, or rod could be used without departing from the principles of my invention. By ex-

erting the draft of the rear sled on the draft-bar and not the beam, the latter is left free to rock readily, as before described, when in use on rough or uneven roads.

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

1. The combination, in a bob-sled, of the runner, the rave, the standard connecting the rear ends of the runner and rave, the beam provided with a slot, F^2, and placed on the standard close to the under side of the rave, the plates *f*, having their upper ends secured to the beam on opposite sides of and a short distance from the standard, and their lower ends brought close to the said standard, and blocks *f' f'*, secured between the lower ends of the plates *f* on approximate sides of the standards, forming the slot F', all substantially as and for the purposes set forth.

2. The combination, with the forward and rear sleds, of a loop or link having its forward end detachably connected with the draft-bar of the forward sled, and its rear end passed through a guide-slot or boxing on the bolster of said forward sled, and connected with the draft of the rear sled, and a pin passed from the bolster of the forward sled through said loop-link, whereby the said link will be held from detachment from said forward sled when detached from the draft-bar thereof, for the purpose of increasing the distance between the two sleds, substantially as set forth.

3. The combination, with the forward and rear sleds, of a connecting-link having its forward end connected with the draft-bar of the forward sled, and its rear end connected directly to the draft devices of the rear sled, substantially as set forth.

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

ALEXANDER TURNER.

Witnesses:
H. D. WHITE,
MARTIN C. SHORT.