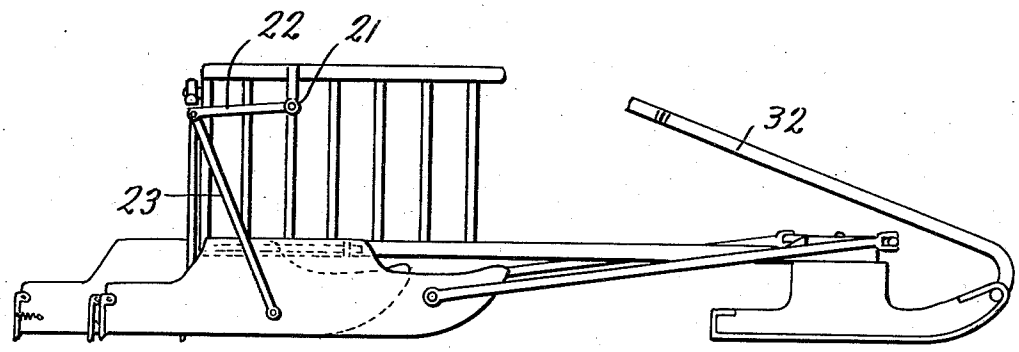
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SLEIGH

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Fig. 1.



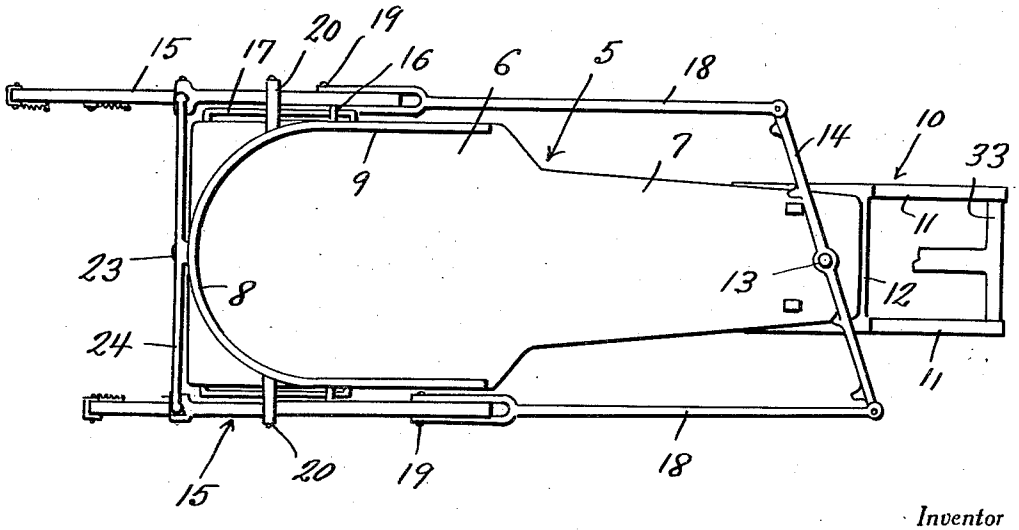


Fig. 2.

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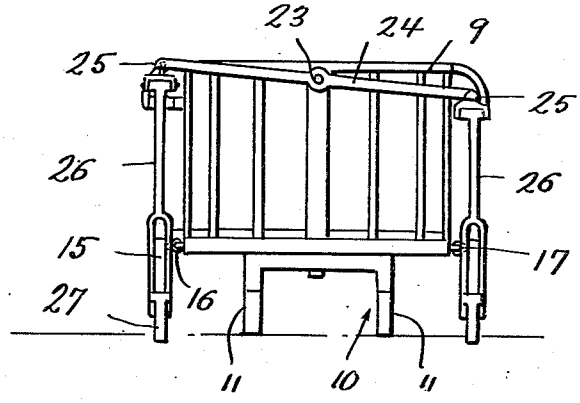
Attorneys

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SLEIGH

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Fig. 3.



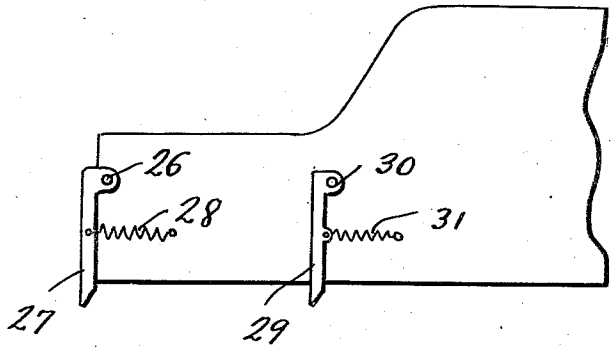


Fig. 4.

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Patented Oct. 5, 1937 2,094,804

UNITED STATES PATENT OFFICE

2,094,804

SLEIGH

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Application April 1, 1937, Serial No. 134,397

2 Claims. (Cl. 280—12.10)

This invention relates to sleighs, and an object of the invention is to provide a sleigh particularly designed for use by young children and which is so equipped as to be propelled by the action of the feet of the occupant, thus enhancing the value of the sleigh as an exercising and body building and strengthening device.

The invention, together with its objects and advantages, will be best understood from a study of the following description taken in connection with the accompanying drawings, wherein:

Figure 1 is a side elevational view of the sleigh;

Figure 2 is a top plan view thereof;

Figure 3 is a rear elevational view of the sleigh; and

Figure 4 is a fragmentary elevational view of one of the rear runners viewing the same from the inner side thereof.

Referring to the drawings by reference numerals, it will be seen that in the preferred embodiment thereof the sleigh comprises a body or platform portion 5 enlarged at one end to provide a seat 6 and being relatively narrow and longitudinally tapered at its opposite end to provide a foot board or extension 7. For the seat 6 there is provided an arcuate back 8 integral with sides 9. The back 8 and integral sides 9 may be of any suitable construction.

At the front of the sleigh there is provided a steering runner assembly indicated generally by the reference numeral 10. The assembly 10 comprises a pair of spaced apart runners 11 connected by a cross-bar 12 on which is supported one end of the foot board 7. Extending through the cross-bar 12 and also through an opening in the foot board 7 is a relatively short pivot post 13 that extends through an intermediate portion of a foot bar 14. It will be understood that both the foot bar 14 and the runner assembly 10 rotate about the post 13 as an axis.

Supporting the seat end 6 of the sleigh and disposed at opposite sides of the sleigh are propulsion runners 15.

Each of the runners 15 on the inner side thereof and adjacent the forward end thereof has a laterally extending eye or apertured lug 16 which is suitably engaged with a longitudinal guide 17 suitably secured at its respective opposite ends to a side edge of the rear portion 6 of the sleigh platform 5 and extending longitudinally of said platform in spaced relation to said edge thereof, as clearly shown.

The propulsion runners 15 are connected with the foot bar 14 through the medium of links 18 which at one end are pivoted to the ends of the bar 14 and at a relatively opposite end are forked to straddle the runners 15 and are pivoted to said runners as at 19.

Extending laterally of the sleigh at the junction of the back 8 and sides 9 are brackets 20 to which are pivoted as at 21 lever arms 22. Rods 23 are pivoted at one end to the runners 15 and at their upper ends to the lever arms 22.

Also, pivoted to the back 8 as at 23 is a rocker arm 24, the respective opposite ends of which have suitable connections 25 with the aforementioned free ends of the lever arms 22. The rocker arm 24 and associated parts serve to support the weight of the sleigh, and thereby make it easier for the child to actuate the runners.

Each runner 15 has pivoted to the rear end thereof as at 26 a propelling foot 27 that is normally urged into parallelism with the adjacent end edge of the runner through the medium of a spring 28.

Also, each runner 15 is provided at the inner side thereof and inwardly from the rear end edge thereof with a second propelling foot 29 pivoted at one end thereto as at 30. A spring 31 is also provided for normally urging the foot 29 to swing in a counter-clockwise direction.

Also, forming part of the steering assembly 10 is a steering rod and pull handle 32 which at one end is provided with a cross-head 33 that is pivotally engaged between the forward ends of the runners 11. Thus, it will be seen that the handle 32 is used for steering the sleigh, and also may be used for pulling the sleigh.

In actual practice the occupant of the sleigh sits on the platform 5 with the feet disposed against the bar 14 and by pushing on the bar 14 with the right and left foot in alternation, the propulsion runners 15 are caused to move forwardly in alternation in a manner to cause the sleigh to move forward. In this connection it will be understood that as a runner 15 moves forwardly, the propulsion feet 27, 29 associated with said runner will swing in a clockwise direction against the action of springs 28 and 31 so as not to interfere with the forward movement of the runner. On the other hand, the feet 27, 29 associated with the other runner will imbed themselves in the snow to provide a traction means therefor with the result that the movement of the runners 15 forwardly in alternation will cause the sleigh to progress forwardly.

Thus, it will be seen that the sleigh will be propelled by the action of the occupant of the sleigh and accordingly the sleigh, in addition to giving pleasure to the occupant, will also call

upon the occupant to exercise his body in the propulsion of the sleigh so that the latter serves also as a body exerciser and builder.

Having thus described the invention, what is claimed as new is:

1. In a sleigh of the character described, a platform presenting a seat at the rear end portion thereof and a leg support at the forward end thereof, a steering runner assembly supporting the forward end of the platform, a pair of propulsion runners supporting the rear end of the platform, means for supporting the rear end of the platform between said propulsion runners in a manner permitting movement of said propulsion runners longitudinally relative to the sleigh platform, a foot bar pivotally mounted at the forward end of said platform, links connecting said foot bar with said propulsion runners for transmitting movement of the foot bar to said runners, a combined draft and steering handle pivotally connected with the steering runner assembly, back and sides rising from said platform at the rear thereof, arms pivoted at one end to said sides, a rocker arm pivoted intermediate its end to said back and connected at its respective opposite end to said arms, and links connecting said arms with said propulsion runners.

2. In a sleigh of the character described, a platform having at the rear thereof a seat having a back and sides, reciprocating runners arranged at opposite sides of the platform and supporting the latter, surface engaging means carried by each of the runners, means for reciprocating the runners; and arms pivoted at one end to the said sides of said seat, a rocker arm pivoted intermediate its ends to the back of said seat and connected at its respective opposite ends to said arms, and links connecting said arms with said reciprocating runners.

JAMES MAURICE McNAMARA.