Dec. 8, 1931. J. A. SKOGLUND 1,834,979

SLED

Filed March 24, 1928

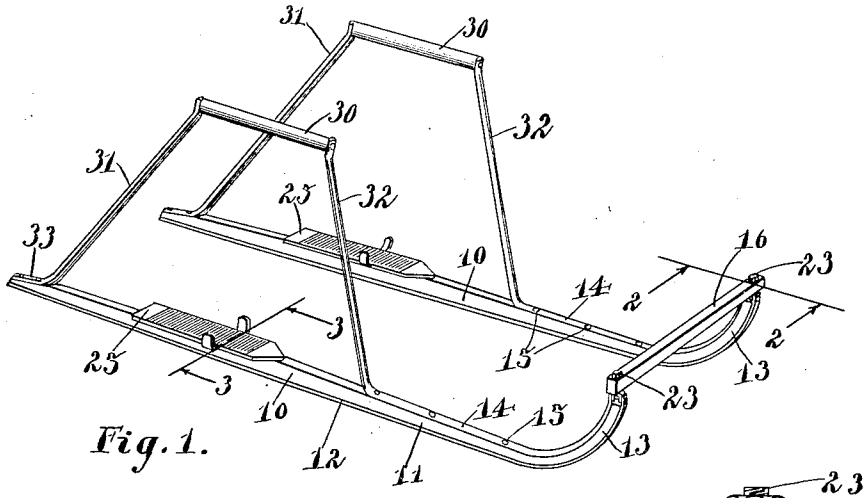

Fig. 1.

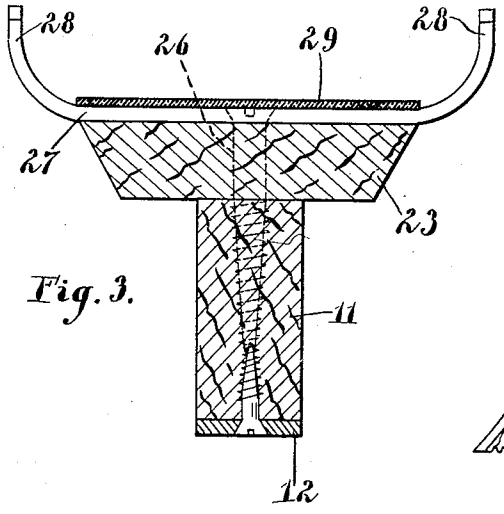

Fig. 3.

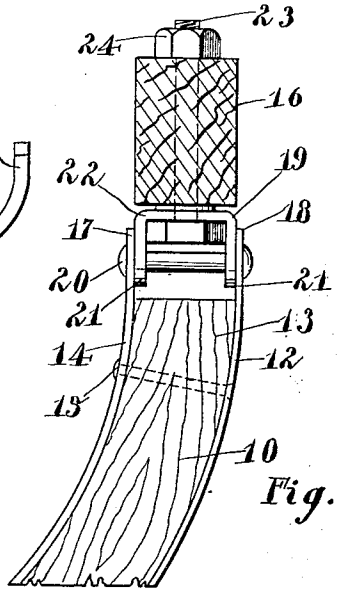

Fig. 2.

Inventor

Joseph A. Skoglund

By Bradbury & Caswell

Attorneys

Patented Dec. 8, 1931 1,834,979

UNITED STATES PATENT OFFICE

JOSEPH A. SKOGLUND, OF ST. PAUL, MINNESOTA

SLED

Application filed March 24, 1928. Serial No. 264,292.

My invention relates to sleds and particularly to the type of sleds adapted to be used by children for amusement and recreation.

An object of the invention resides in providing a sled by means of which the user may slide or coast in an upright position or by means of which full control of the direction and speed of the sled may be had by the user.

An object of the invention resides in providing a pair of spaced runners with upturned ends connected together at such ends with a tie-bar, said runners being arranged for universal movement relative to said tie-bar.

Another object of the invention resides in attaching to the runners proper foot supports and in employing in conjunction with the runners standards terminating in handles superimposing said foot supports whereby the user may stand with one leg upon each runner and hold himself in an upright position thereon through the use of said handles.

Another object of the invention resides in employing inverted U-shaped yokes for attaching said runners to said tie-bar, said yokes being pivoted to said runners and to said tie-bar, such pivots being at right angles to one another.

With the foregoing and other objects in view, which will appear in the following description, the invention resides in the novel combination and arrangement of parts and in the details of construction hereinafter described and claimed.

In the drawings:

Fig. 1 is a perspective view of my invention.

Fig. 2 is an elevational sectional view taken on line 2—2 of Fig. 1 and drawn to an enlarged scale.

Fig. 3 is a sectional elevational view taken on line 3—3 of Fig. 1 and drawn to an enlarged scale.

My invention proper consists primarily of two runners 10 and 11 which may be constructed of wood, metal or any suitable material and which, when constructed of wood as shown in the drawings, are each provided with a metal shoe 12 along the entire lower edge thereof for engagement with the snow or ice on which the sled is to be used. The runners 10 and 11 are provided with upturned ends 13 and are otherwise straight throughout their extent. When the runners 10 and 11 are constructed of wood the same may be reinforced by means of metal bands 14 which are riveted to the runners proper by means of rivets 15 and extend upwardly along their upturned portions 13 thereof as best shown in Figs. 1 and 2.

The runners 10 and 11 are relatively free throughout their extent excepting at the forward portions of the same where the upturned ends 13 are connected together by means of a tie-bar 16 for universal movement relative thereto. The method of connecting the runner to this tie-bar is best shown in Fig. 2. To the extreme ends 17 and 18 of the bar 14 and the shoe 12 which project upwardly beyond the upper end of the upturned end 13 of each of said runners, are pivoted yokes 19 which have rivets 20 extending through the said ends 17 and 18 and through the leg portions 21 of said yokes. The body portions 22 of these yokes are pivoted to the ends of the tie-bar 16 by means of bolts 23 which extend completely through the same and are provided with nuts 24 by means of which the device may be readily assembled. By means of this construction the respective runners 10 and 11 may be moved about the vertical axes of the bolts 23 so that the said runners may be arranged progressively one in front of the other or the same may be disposed angularly in either diverging or converging relation with one another to control the operation of the device. At the same time both runners 10 and 11 may be swung laterally about rivets 20 so as to tilt relative to the tie-bar 16 or the ground upon proper manipulation of the user.

Intermediate the ends of the runners 10 and 11 are attached to the same foot supports 25 which may be secured to said runners by means of screws 26 as best shown in Fig. 3. These foot supports have secured to them bars 27 extending across the same which are arranged with upwardly extending lugs 28

adapted to engage the shoe of the user so as to retain the same in place upon said support during the operation of the device. If desired, a rubber mat 29 or other suitable abrasive covering may be placed upon each of the foot supports to prevent the user's foot from slipping.

In conjunction with the foot supports 25 I employ two handles 30 which are secured to the ends of uprights 31 and 32 attached to the runners 10 and 11. These uprights are disposed one on each side of the foot supports 25. The uprights 32 may if desired be constructed as continuations of the strips 14 while the uprights 31 may be constructed of similar material and formed with bent portions by means of which the same may be rigidly secured to the rear ends of the said runners. The uprights 31 and 32 are spaced from one another a considerable distance and the handles 30 superimpose the foot supports 25 in such a manner that the user of the sled may conveniently stand upon said foot supports and at the same time grasp the handles 30 and hold himself rigidly supported upon the device.

In the use of my invention the user simply steps upon the two supports and grasps the handles 30. He may then raise or lower the respective runners and move the same forward or rearwardly in effect walk with the device the same as if he were using skiis or snow shoes. If the user desires he may still retain the grasp upon handles 30 and walk upon the ground, either drawing the sled with him or elevating the same and carrying the structure through the handles 30. In either case the entire space between the runners is free so that interference with walking is entirely precluded. In the use of the device for coasting or sliding, the user stands upon the foot supports 25 and holds the handles 30. When the sled reaches a curve the body of the user may be tilted inwardly toward the center of the curve to counteract the effect of centrifugal force and the runners 10 and 11 of the sled may be automatically tilted to conform to the position of the user. At the same time, one of the runners 10 may be advanced in front of the other runner to facilitate the proper control of the device in passing around curves. When it is desired to retard the movement of the sled the runners may be spread apart so that the rearward ends thereof diverge, thereby increasing the friction of the runners upon the snow or ice as the sled travels in its forward direction. Considerable amusement and recreation may be had with my invention due to the fact that the user is required to exercise skill and dexterity in handling and manipulating the device. The user will find considerable amusement in attempting to coast upon one foot and may alternately place the runners in contact with the ground in accordance with the surface or condition of the ground so as to minimize the frictional resistances and increase the length of the trip.

My invention is highly advantageous in that a simple and fool proof device is provided whereby considerable enjoyment and recreation may be had for the user. The device may be constructed at a very nominal cost and the entire sled is especially light in weight so that it may be readily carried about by children without causing appreciable fatigue. The user has at all times complete control of the device so that the sled may be directed or stopped as required, thereby rendering the device more useful for recreation upon public streets where an appreciable amount of traffic is present. Due to the use of the handles and the positioning of the same relative to the foot supports it is practically impossible for the user to fall off the sled and at the same time the sled is operated by the user in a standing posture, thereby eliminating the necessity of repeated changing from a standing to a reclining posture as is the case in the use of the ordinary sled.

Changes in the specific form of my invention, as herein disclosed, may be made within the scope of what is claimed without departing from the spirit of my invention.

Having described my invention, what I claim as new and desire to protect by Letters Patent is:

1. A sled comprising a pair of spaced runners having upturned ends, a tie-bar extending across said runners, means for securing the upturned ends of said runners to said tie-bar for pivotal movement relative thereto, said means permitting the independent movement of the runners relative to one another, and means for supporting an occupant upon said runners.

2. A sled comprising a pair of spaced runners having upturned ends, a yoke pivoted to the end of each of said runners, a tie-bar pivoted at its ends to each of said yokes, said pivots being disposed at right angles to one another, a foot support secured to each of said runners rearwardly of said tie-bar, uprights extending upwardly from said runners, and handles attached to said uprights and superimposing said foot supports.

3. In combination, a pair of runners, a tie member universally connecting the runners at the tips thereof, each runner having a foot rest rearwardly of its tip and having a handle for assisting in the independent control thereof.

4. In combination, a pair of runners, a tie member universally connecting the runners at the tips thereof, each runner having a foot rest rearwardly of its tip and having a handle for assisting in the independent control thereof, said handle being disposed above the foot rest and adapted to be steadied against a rider's leg planted on said foot rest.

5. A sled comprising a pair of runners having upturned ends, a tie bar joining said runners, means connecting the upturned ends of the runners to the tie bar for universal movement relative thereto, foot rests secured to said runners, and handles extending upwardly therefrom.

6. A sled comprising a pair of runners, a tie bar universally connecting said runners at the front ends thereof, said runners being disconnected throughout their extent rearwardly of said tie bar, and means on said runners and independent of said tie bar for supporting a rider.

7. A sled comprising a pair of runners, a tie member universally connecting said runners at the forward ends thereof, each runner having a foot rest thereon rearwardly of its point of connection with said member and having a hand grip above said foot rest, and supports for the grip secured to the runner forwardly and rearwardly of the foot rest.

8. A sled comprising a pair of runners, a tie member universally connecting one runner with the other, each runner having a foot rest thereon and a hand grip extending in the direction of the runner and a support for the hand grip secured to the runner.

9. A sled comprising a pair of runners, a tie member universally connecting one runner with the other, each runner having a foot rest thereon and a hand grip directly above the foot rest extending in the direction of the runner, and a support secured to the runner for said hand grip.

10. In combination, a pair of elongated supports, anti-friction ground engaging means on said supports, a tie member connecting said supports at their forward portions, said supports being disconnected throughout their extent rearwardly of said tie member and being adapted to move longitudinally relative to one another, and a foot rest on each of said supports, said foot rest being disposed rearwardly of said tie member.

In testimony whereof I have affixed my signature to this specification.

JOSEPH A. SKOGLUND.