July 23, 1929. F. MICHILLI 1,722,012

SLED

Original Filed Aug. 10, 1926

Fig. 1.

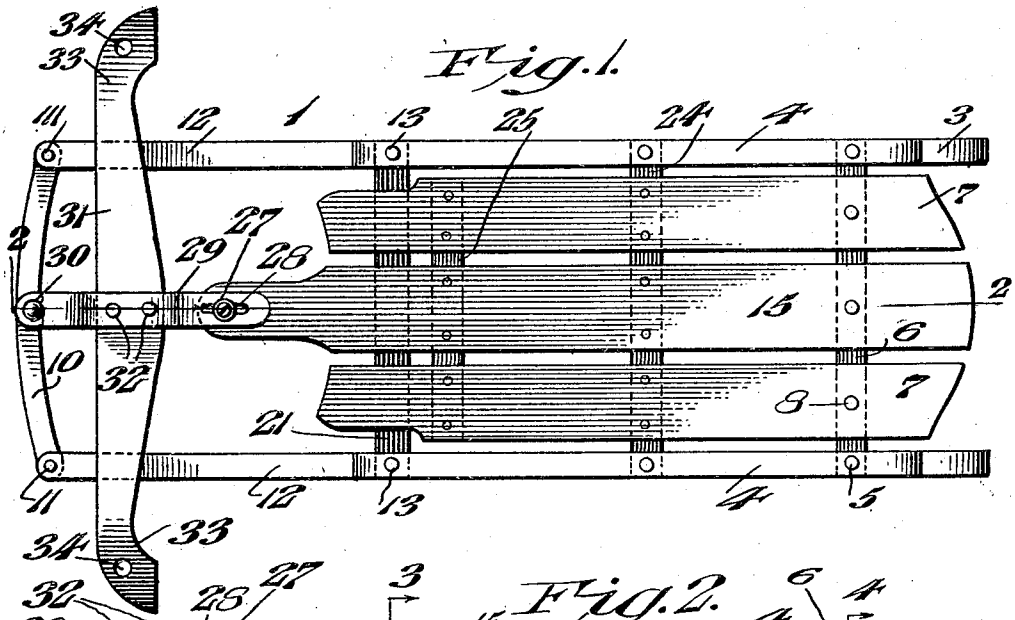


Fig. 2.

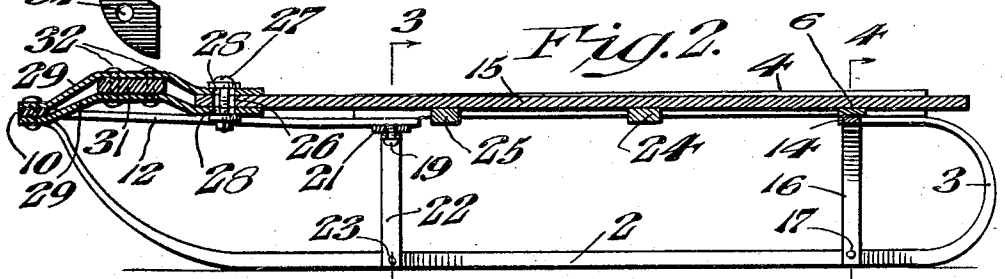


Fig. 3.

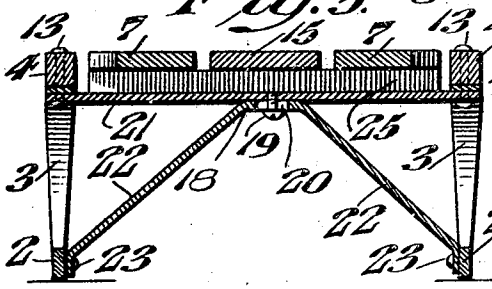


Fig. 4.

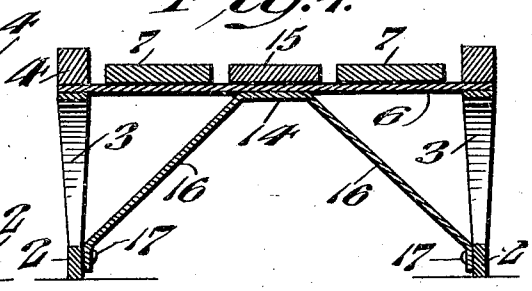


Fig. 5.



Inventor

Fausto Michilli

By Herbert S. Fairbanks

Attorney

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# UNITED STATES PATENT OFFICE.

FAUSTO MICHILLI, OF CAMDEN, NEW JERSEY.

## SLED.

Application filed August 10, 1926, Serial No. 128,353. Renewed January 9, 1929.

The object of my invention is to devise a novel and simplified construction of a sled wherein the steering can be effected by flexing the runners.

A further object of my invention is to devise a novel construction of a sled in which the top is resiliently supported between the front brace connected with the runners and an intermediate brace, so that the resiliency of the sled is increased.

With the above and other objects in view as will hereinafter more clearly appear, my invention comprehends a novel construction and arrangement of a sled.

It further comprehends a novel construction of a sled wherein the runners and braces are constructed and connected in a novel manner and wherein the top does not come into contact with the front brace.

It further comprehends a novel sled having a novel construction of a steering bar.

Other novel features of construction and advantage will hereinafter more clearly appear in the detailed description and the appended claims.

For the purpose of illustrating the invention, I have shown in the accompanying drawing a typical embodiment of it, which, in practice, will give reliable and satisfactory results. It is, however, to be understood that this embodiment is typical only, and that the various instrumentalities of which my invention consists can be variously arranged and organized, and the invention is not, therefore, limited to the precise arrangement and organization of these instrumentalities as herein set forth.

Figure 1 is a top plan view of a sled embodying my invention.

Figure 2 is a section on line 2—2 of Figure 1.

Figure 3 is a section on line 3—3 of Figure 2.

Figure 4 is a section on line 4—4 of Figure 2.

Figure 5 is a front elevation of the steering bar in detached position.

Similar numerals of reference indicate corresponding parts.

Referring to the drawings:—

1 designates a sled embodying my invention. The sled is provided with a pair of runners 2 which are formed from flat stock which is vertically disposed as at 2 throughout the length of the ground contact and they are then flattened at right angles and curved as at 3, and the free end of the runners at the rear end are secured to the side rails 4 by means of fastening devices 5, certain of which pass through the ends of the cross bar 6 which is secured to the top boards 7 by means of fastening devices 8.

The runners at the front end of the sled are deflected upwardly and provided with the flanges 9 which are secured to the front brace 10 by means of rivets 11 which pass through the front ends of the side braces 12 which latter are pivoted at their rear ends to the side rails by means of fastening devices 13.

14 designates the rear brace which is fixed to the central top board 15, and is provided with the diverging legs 16 which are secured to the runners by means of fastening devices 17.

18 designates the front brace which has a fastening device 19 which passes through a slot 20 and is secured to the front brace 21 and, except for the slot, is of the same construction as that of the rear brace, it being provided with the outwardly diverging legs 22 which are secured to the runners by fastening devices 23.

The sled is provided with an intermediate cross bar 24 fixed to the side rails 4 and to the boards 7 and 15 of the top.

25 designates a cross bar which is fixed to the top boards 7 and 15. The central top board has a slot 26 through which passes a fastening device 27 which passes through the slots 28 in the straps 29 which are pivoted at their forward end to the front brace by means of a fastening device 30.

A steering bar 31 is fixed to the straps by means of fastening devices 32. It will be noticed that this steering bar is deflected upwardly as at 33 in order to form a grasping handle and it is also preferably provided with apertures 34 in order to adapt it to receive a rope for drawing the sled.

The fastening devices 13 which secure the metal side braces 12 to the side rails 4 passes through the ends of the front cross brace 21.

It will be apparent that in the use of the sled, the front brace 18 which is rigidly connected with the runners is free to slide laterally as the steering bar is actuated in one direction or the other.

The metal side braces 12 are also free to turn on their fulcrums. Relative movement is permitted between the steering bar 31 and

the front brace 10, and the straps are permitted to fulcrum on their fastening device 27 which pass through the central top board.

The top of the sled is supported in such a manner that it does not come into contact with the front cross brace 21, so that the top is resiliently supported between the intermediate brace 24 and the front cross bar 10, and a desired amount of resiliency or cushioning action can be obtained.

The top of the sled is substantially rigid but the front metal side rails 12 formed by the strips of sheet metal are movable on their fulcrums, and there is also a slight flexing of the side rails 4 at their forward ends, it being seen that the flexing takes place from their point of fixed attachment to the intermediate cross bar.

Attention is directed to the fact that the point of flexing, when the steering bars are actuated, from the runners is from the rear brace until the wall of the slot 20 in the front cross bar comes into contact with its fastening device 19.

It will be apparent that my invention can be economically manufactured as all the metal parts can be formed by a stamping or dieing operation from metal strips in sheet form.

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

1. In a sled, side rails, runners having their rear ends deflected upwardly and connected to said side rails, a cross brace connecting the front ends of said side rails and runners, a top, rear braces fixed to said top and to said side rails and runners, a brace at the forward end of said top and out of contact therewith and provided with a fastening device, diverging legs secured to said runners and having a slot in which said fastening device has limited lateral movement, and steering mechanism connecting said front brace with said top to provide for the flexing of said runners.

2. In a sled, side rails, runners, a front brace connecting the front ends of said runners and side rails, a rear brace connected to the rear ends of said runners and to said side rails, diverging legs connected with said side rails and runners, a top fixedly connected with said rear braces and side legs, an intermediate brace connected with said side rails but out of contact with said top, legs connecting such intermediate brace with said side rails and runners, and a steering connection operatively connected with said front brace and with said top.

FAUSTO MICHILLI.