J. M. CROWE.

SLED.

APPLICATION FILED JAN. 8, 1917.

1,264,490. Patented Apr. 30, 1918.

Fig. 1.

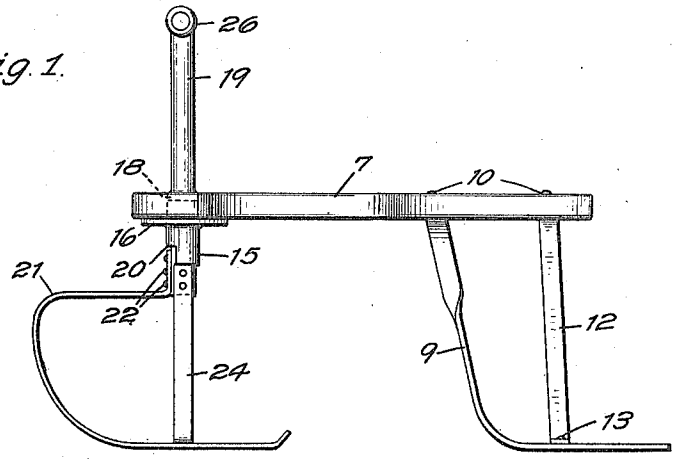


Fig. 2.

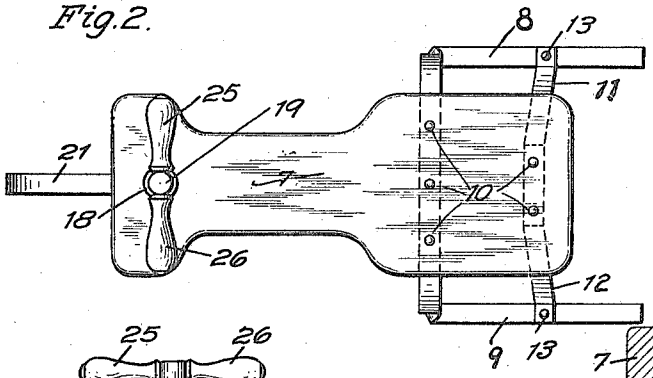


Fig. 6.

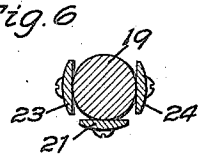


Fig. 4.

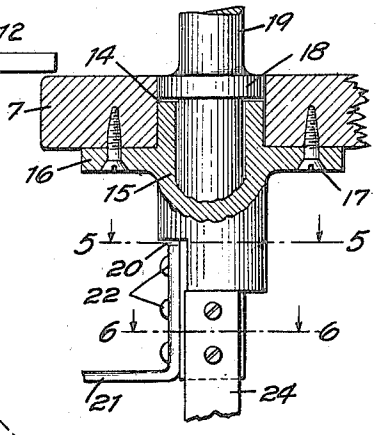


Fig. 3.

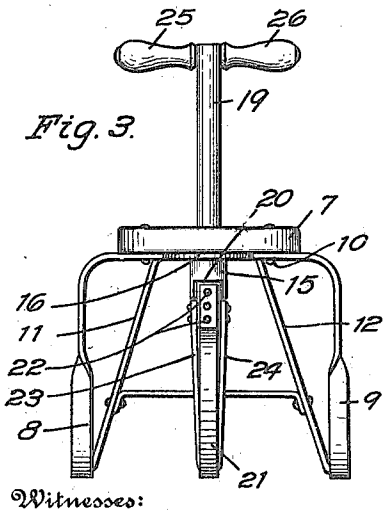
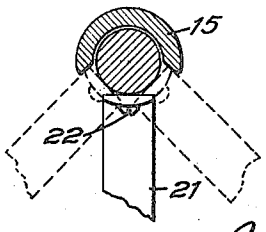


Fig. 5.



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SLED.

1,264,490. Specification of Letters Patent. Patented Apr. 30, 1918.

Application filed January 8, 1917. Serial No. 141,070.

To all whom it may concern:

Be it known that I, JOHN MARSHALL CROWE, a citizen of the United States of America, and resident of Covington, in the county of Kenton and State of Kentucky, have invented a new and useful Improvement in Sleds, of which the following is a specification.

An object of my invention is to produce a sled which is dirigible and which requires less effort to steer than other sleds of this type.

A further object is to produce a sled which may be propelled readily by the legs of a child sitting astride the sled.

These and other objects are attained in the sled described in the following specification and illustrated in the accompanying drawings, in which:

Figure 1 is a side elevation of a sled embodying my invention.

Fig. 2 is a plan view of the sled disclosed in Fig. 1.

Fig. 3 is a front view of the sled disclosed in Figs. 1 and 2.

Fig. 4 is a fragmental side elevation upon an enlarged scale, of a detail of my improved sled, certain portions being shown in section for convenience of illustration.

Fig. 5 is a sectional view taken on the line 5—5 of Fig. 4.

Fig. 6 is a sectional view taken on the line 6—6 of Fig. 4.

My improved sled consists of a base board 7 upon the under side of and at the rear of which are mounted a pair of stationary runners 8 and 9, the upper ends of these runners being secured to the base board by means of screws or similar fastening means 10. The ground-contacting portions of the runners are supported by braces 11 and 12 which are secured to the under side of the base in the same manner that the runners are secured thereto and which are secured at their lower ends to the runners by means of rivets or other suitable fastening means 13. At the front end base board 7 is provided with opening 14 in which is located a sleeve 15 having an annular flange 16 which is secured to the under side of the base board by means of screws or other suitable fastening devices 17. This sleeve extends above and below the flange, the extension above the flange being preferably of such a length as to leave sufficient room for the reception of a flange 18 formed on a steering post 19 located within the sleeve. The sleeve extension below the flange is provided with a notch 20 which faces the front of the sled when the sleeve is secured in position on the base, as disclosed in Figs. 1 and 3. The steering post extends below the lower end of the sleeve and a front runner 21 is secured thereto, the upper end of the runner extending into the notch and being secured to the steering post by means of rivets or screws 22. To the sides of the projecting end of the steering post, braces 23 and 24 are secured, the lower end of the braces being attached to the runner in the same manner that the lower ends of braces 11 and 12 are secured to runners 8 and 9. The rear end of runner 21 is turned upwardly so as to facilitate its movement in the snow when the steering post 19 is rotated. At the upper end of the steering post, handles 25 and 26 are secured, these handles being provided to facilitate the operation of turning the steering post and the front runner attached thereto.

It will be seen that because of the position of the upper end of the front runner within the notch 20 of the sleeve, the movement of the steering post is limited as disclosed in Fig. 5, in which the limits of movement are shown in dotted lines. The sleeve shoulders formed at the ends of the notch, are the stops against which the upper end of the runner engages when moved to one or the other limit of motion. In addition to this the upper ends of braces 23 and 24 as well as of runner 21, engage the lower end face of the sleeve so as to hold the steering post in position with its collar 18 in engagement with the upper end of the sleeve. This not only prevents displacement of the steering post, but also is the means for supporting the base board at its front end. An advantage attained by this construction is that the runner cannot be turned far enough to capsize the sled or to cause the runner to be wrenched or bent by having its side presented at too great an angle to the forward motion of the sled. A further advantage is that the engagement of the braces 23 and 24 with the lower end surface of the sleeve, decreases the cost of manufacture in that it eliminates the necessity of providing a sepa-

rate bearing such as would be afforded by a collar separately turned and mounted on the lower end of the steering post.

A further advantage attained by my improved sled construction is that the runners, instead of extending the entire length of the sled, as in other constructions, are short, and therefore, may be more easily turned in the snow than sleds having runners extending throughout their entire length. An additional advantage of the short runner construction as applied to a dirigible sled is that it eliminates the necessity of constructing the runners of flexible material and thereby having to weaken the construction at certain points in order to render the runners sufficiently flexible to steer the sled properly. Another advantage attained by my improved sled construction is that its construction is of such a height and shape that it may be propelled readily by the feet of a child sitting astride the sled.

Having thus described my invention, what I claim is:

1. A sled comprising a base, a stationary runner secured to one end of the base, a steering runner pivotally mounted at the opposite end of the base, and means for pivotally mounting the steering runner, comprising a steering post having the steering runner secured thereto, a sleeve secured to the base, adapted pivotally to mount the post, a brace secured to the runner and the post and having its upper end in engagement with the sleeve for supporting the base, and a stop formed on the sleeve, adapted to limit the movement of the post.

2. A sled comprising a base, a stationary runner secured to the base at the rear, a steering runner consisting of a strip of material pivotally mounted on the base at the front, and means for pivotally mounting the steering runner, comprising a steering post having one terminal of the steering runner secured thereto, and a sleeve secured to the base, adapted pivotally to mount the post and having a notch formed therein for cooperation with said terminal of the steering runner to limit the movement of the runner.

3. A sled comprising a base, a steering runner pivotally mounted on the base, and means for pivotally mounting the steering runner, comprising a steering post having the upper end of the steering runner secured thereto, a sleeve secured to the base, adapted pivotally to mount the post and having a notch formed therein for coöperation with the upper end of the steering runner to limit the movement thereof, and a brace secured to the steering runner and the post with its upper end in engagement with the sleeve to support the base.

In testimony whereof, I have hereunto subscribed my name this 2nd day of January, 1917.

JOHN MARSHALL CROWE.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."