Sept. 20, 1949. C. I. NELSON 2,482,554

SLED

Filed Jan. 11, 1947

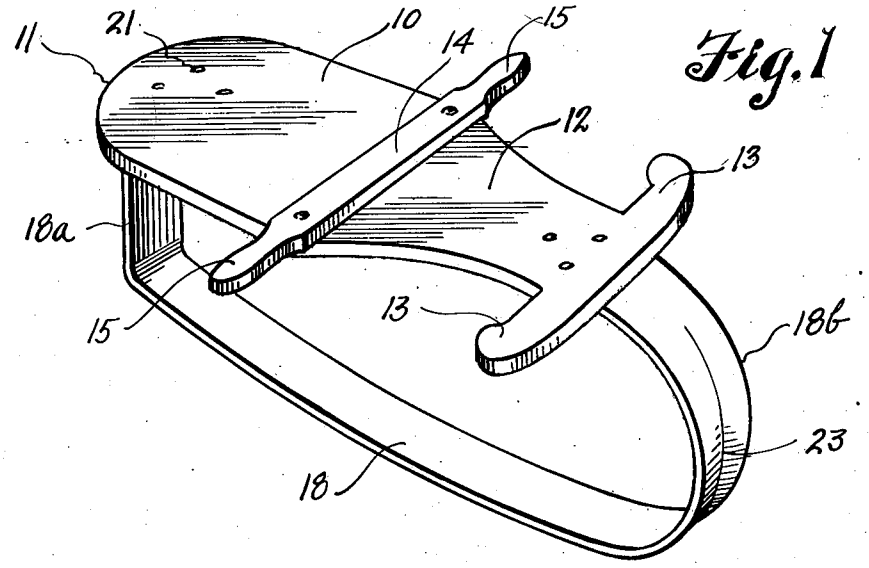
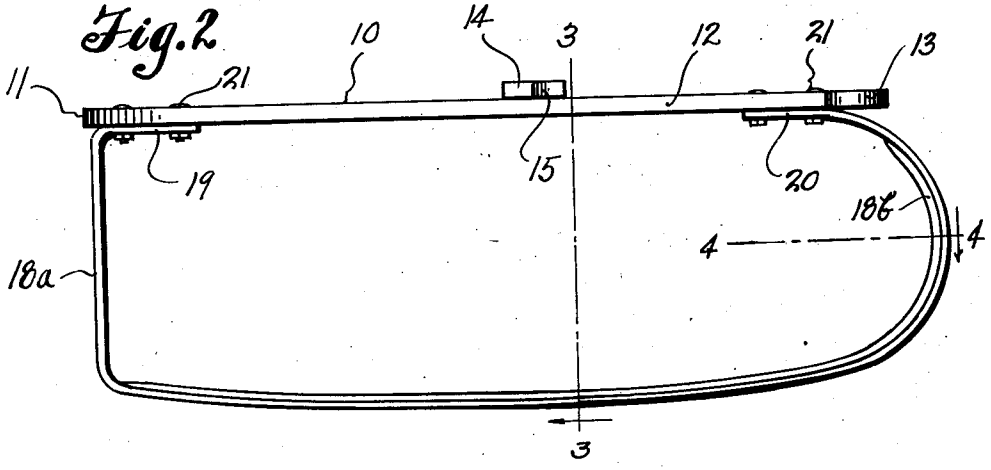


Fig. 1

Fig. 2



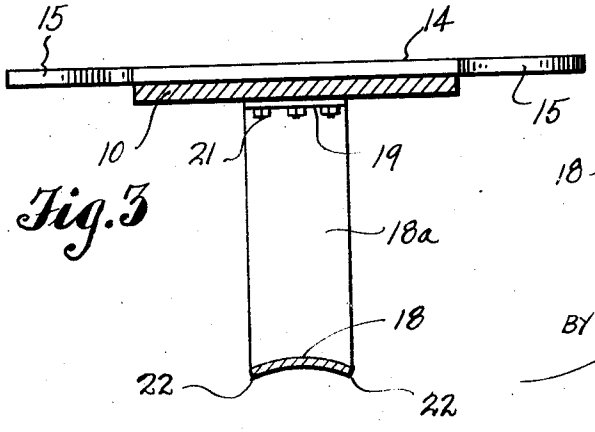
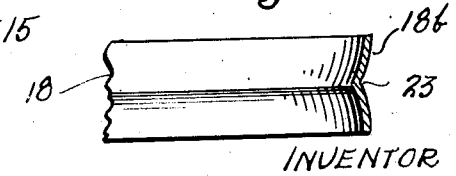


Fig. 3

Fig. 4



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1 Claim. (Cl. 280—12)

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This invention relates to sleds and it has reference more particularly to sleds designed for amusement and primarily for coasting; it being the principal object of the invention to provide a single runner sled that can be used both on snow and on ice and which, by reason of its requiring a certain amount of skill for controlling its action, will afford an unusual amount of amusement to the user.

More specifically stated, the objects of the invention reside in the provision of a coasting sled, designed to carry one person at a time, and comprising a seat portion equipped with foot rests and hand hold portions, and supported by a single, centrally located runner of novel construction that makes it possible for the rider to steer the sled merely by leaning toward one side or the other or by shifting his weight to one side or the other.

It is also an object of the invention to design a runner of novel form that facilitates the control of the sled.

Other objects of the invention reside in the details of construction and combination of parts, as will hereinafter be fully described.

In accomplishing these and other objects of the invention, I have provided the improved details of construction, the preferred forms of which are illustrated in the accompanying drawings, wherein—

Fig. 1 is a perspective view of a sled embodying the improvements of the present invention therein.

Fig. 2 is a side elevation of the sled.

Fig. 3 is a vertical cross-section of the sled, taken on line 3—3 in Fig. 2.

Fig. 4 is a horizontal section on line 4—4 in Fig. 3.

Referring more in detail to the drawings—

In its present preferred form of construction, the sled comprises a seat portion 10, which, as shown best in Fig. 1, comprises a single piece of material, preferably a piece of plywood, approximately twenty-five inches long and ten inches wide. This plate of plywod is rounded at the rear end, as at 11 and has a symmetrically narrowed forward end portion 12 from which laterally directed arms 13—13 extend to serve as rests against which the rider of the sled may place his feet in coastings.

Fixed transversely of the seat portion 10, about midway of its front and rear end edges, is a cross bar 14 with opposite end portions 15—15 extended beyond the side edges of the seat sufficiently that they may serve as hand holds for the sled rider.

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The seat portion of the sled is supported by a single, centrally located runner that extends the full length of the said member. It is shown best in Fig. 2 that the runner comprises a single and continuous metal strap, forming the runner portion proper, designated by numeral 18, and this has an upright portion 18a at its rear end which terminates in a forwardly turned flange 19 at its upper end. At its forward end, the runner 18 has an upwardly and forwardly curved portion 18b terminating in a rearwardly directed horizontal flange 20, at the same horizontal level as the flange 19. The seat member 10 is secured rigidly to the flanges 19 and 20 by bolts, as at 21, or by other suitable means.

While the dimensions of the sled may vary without departing from the invention, it has been found practical to have the runner support the seat about nine inches above ground level. Also, it is desirable to form the runner from a flat strip of spring steel about three or four inches wide. However, this may vary within certain limits.

As a feature of the invention, the longitudinal runner portion 18 is slightly downwardly curved between its forward and rearward ends as shown in Fig. 2 to make turning easier and in cross section, as seen in Fig. 3, the runner is transversely concaved, thus to form a rather shallow downwardly facing trough or channel that affords better steering qualities when coasting on snow and, if riding on ice, provides two parallel contact edges along the runner, as at 22—22 in Fig. 3, that operate as parallel runners and afford better steering control and insure straight travel.

The forward, upwardly round end portion 18b of the runner is formed with a central longitudinal trough 23, as noted in Fig. 4, and the metal at opposite sides of the center line of the trough is forwardly convexed. This detail of construction gives better steering control of the sled when coasting in snow of some depth.

To use the sled, the rider sits upon the rear end portion of the seat 10 and grasps the handles 15—15. Then he starts the sled down a slope by pushing with his feet and when once started, places his feet on the rests 13—13. The tendency of the moving sled is to travel in a straight line but it may be caused to turn toward one side or the other by leaning in that direction, and this may be assisted by use of the feet, for example, by extending one foot to the side or allowing it to drag in the snow or to otherwise throw the

center of balance to that side and cause the sled to lean as required to cause it to veer in that direction.

Sleds of this kind afford much amusement either on snow or on ice, and are especially desirable for coasting on ski courses, being less dangerous to use than skis and not requiring the skill to operate that is required for skiing with safety.

Sizes may be varied as required or desired, and it is not the intent that the sled be limited as a one person sled but that it be made in lengths suitable for one or more persons.

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

A sled comprising a horizontal top plate, providing a seat portion at the rearward end thereof and having oppositely directed and laterally extended foot rests at its forward end, a cross bar fixed upon the top plate and extending to opposite sides thereof and providing hand hold members at opposite sides and forwardly of the seat portion and a single, centrally located runner extended in the longitudinal vertical plane of said top plate; said runner comprising a flat, resilient strip of metal forming a runner body of the full length of the top plate, terminating at its rear end in a vertical leg that supports the rear end of the top plate thereon and formed at its forward end in a circularly rounded, forwardly directed portion that supports the forward end of the top plate.

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