March 12, 1968 J. SALISBURY 3,372,945

SNOW SLED

Filed March 15, 1965

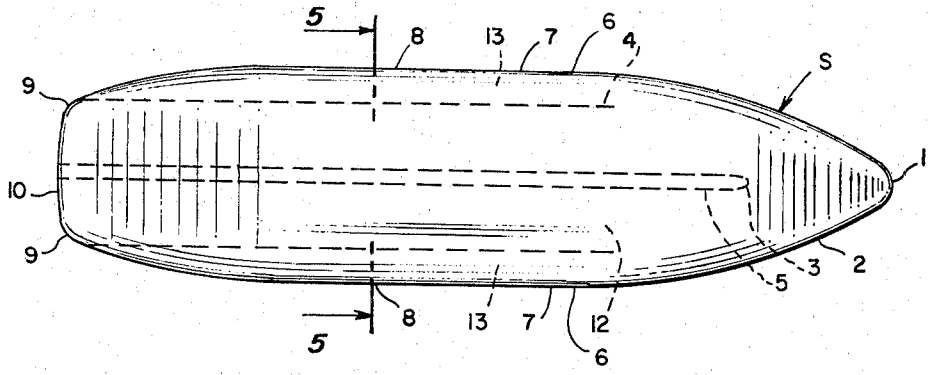


FIG. 1

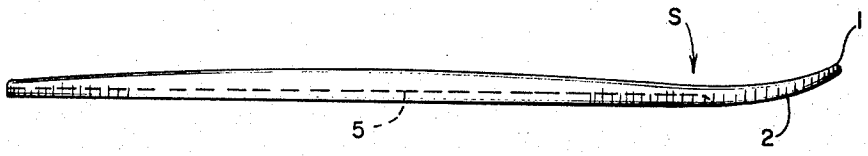


FIG. 2

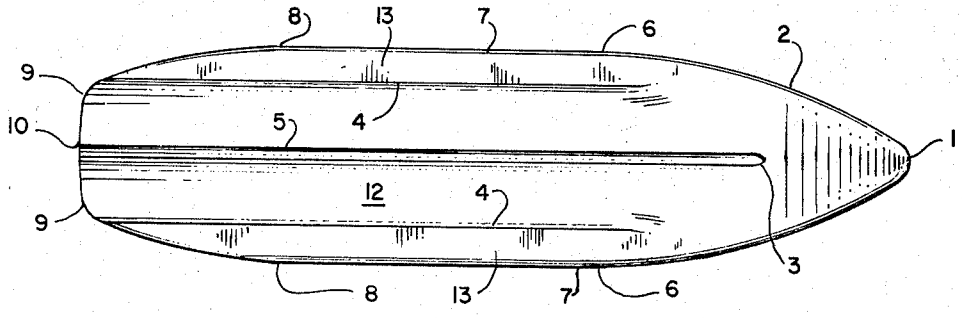


FIG. 4

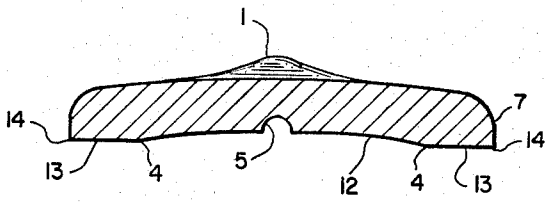


FIG. 5

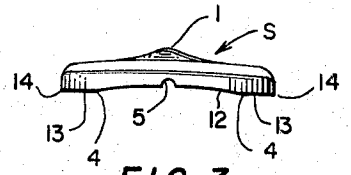


FIG. 3

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SNOW SLED

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ABSTRACT OF THE DISCLOSURE

A single, board-like member for supporting a user for sliding down a snow slope, having a width to accommodate both feet of the user, an upwardly curving front end having converging sides, a bottom having a longitudinally extending, flat planar surface at each side, a longitudinally extending and laterally concave surface disposed between the flat surfaces and a longitudinally extending groove disposed centrally of the concave surface, with the concave surface extending to the underside of the upwardly curving front end, and a rear end which converges at each side to the intersection of the concave surface and planar surfaces. The member has an upper surface which is convex in both directions, the surface of the top being formed by a resin impregnated, fiberglass cloth of coarse weave and the surface of the bottom of a resin impregnated, fiberglass cloth of fine weave, such coatings being placed on a blank formed of wood, an expanded resin or the like.

This invention relates to snow sleds, and more particularly to a single-runner type of snow sled, a primary object of the invention being to provide a novel and improved construction of a flat, board-like snow sled which is similar in appearance to a surfboard.

Another object of the invention is to provide a novel and improved snow sled which is capable of being ridden downhill on a snow slope with a rider being either prone or seated or standing up and riding the sled in the same manner as an experienced surfer rides to ocean waves.

Another object of the invention is to provide a novel and improved flat, board-like snow sled which may be ridden with the rider standing upright in the same manner as a surfer rides a surfboard, and which may be maneuvered, turned and controlled simply by the rider shifting his weight as the sled moves downhill or is traversing a snow slope.

Another object of the invention is to provide a novel and improved snow sled having inherent guiding and controlling features which permit it to be maneuvered over the snow, and generally to function in a manner analogous to a surfboard in the ocean.

Another object of the invention is to provide a novel and improved board-like snow sled which is a simply constructed, neat appearing, low-cost, rugged and durable unit.

With the foregoing and other objects in view, my invention comprises certain constructions, combinations and arrangements of parts and elements as hereinafter described, defined in the appended claims, and illustrated in preferred embodiment in the accompanying drawing, in which:

FIGURE 1 is a plan view of the improved sled with broken lines indicating certain edges at the underside of the improved sled.

FIGURE 2 is a right side elevational view of the sled.

FIGURE 3 is a rear end view of the sled.

FIGURE 4 is a bottom view of the sled.

FIGURE 5 is a transverse sectional view of the sled as taken from the indicated line 5—5 at FIG. 1, but on an enlarged scale and showing the concavities and convexities thereof as being slightly exaggerated.

Referring more particularly to the drawing, the improved sled S is in the general form of a flat, longitudinally-extended body having, in plan, an appearance analogous to a boat. It may be of various sizes and the proportions as illustrated, may be varied somewhat without departing from the scope of the invention. One desirable size was found to be 48-inches in length and 12-inches wide.

The central portion of this sled has the opposing side edges **7** in spaced parallelism for approximately one-third the length of the body. At the front prow section **2**, the side edges **7** smoothly converge from the central portion with each side of the prow being curved from tangent points **6** to extend forwardly to an upturned, blunted, leading tip **1**. The length of this prow section is also approximately one-third the length of the body. The side edges **7** at the rearward section also smoothly converge, but only slightly, from rear tangent points **8** to merge with a transverse rear wall **10**, the transition at each side between the slight rearward convergence and the rear wall **10** being by rounding curves **9** to eliminate sharp corners on the unit.

Both the undersurface and the top surface of their snow sled are generally flat, but each is contoured so that portions of each surface will extend above flat reference planes which generally represent these surfaces. In the first instance, the contoured undersurface is to facilitate movement across the snow and in the second instance, the contoured top surface is to help a rider to balance and control the sled. Also, the leading portion of the prow section **2** is turned upwardly to an extent sufficient to facilitate movement over ordinary surface irregularities without the tip **1** digging into the snow. Further, this tip **1** facilitates turning the sled when the sled is tipped sidewise, as in a natural turning maneuver by the rider. This forward, upturned section is not necessarily transversely contoured, but is preferably tapered towards the leading tip **1** to reduce it in thickness to a minimum at the tip **1**, as illustrated.

The undersurface of this sled, extending rearwardly from this forward, upturned tip, is transversely arched to provide a shallow, longitudinal, transverse concavity **12** at the center portion thereof. This concavity **12**, extending substantially the length of the sled, is bounded at each side by narrow, longitudinal shelves **13**. These flat side shelves **13**, lying in the aforesaid reference plane are outwardly bounded by the outer edges **7** of the sled body, and inwardly bounded at the intersection **4** of the shelves **13** with the shallow cavity **12**; such intersection being shown at FIG. 4 and in broken lines at FIG. 1. The rearward intersection line **4** of each shelf with the cavity terminates at the rearward end of the sled at the approximate intersection of the rearwardly converging sides **7** with the transverse rear wall **10**, at the curves **9**. The forward termination of the intersection line **4** is at the forward prow section where the surfaces merge together. To complete this undersurface structure, a central longitudinal groove **5**, which is generally semicircular in form, extends from the point **3** where the forward portion of the prow commences to upturn and thence, rearwardly to the rear end of the sled.

The upper surface is formed by being both longitudinally and transversely convexed to provide an elongated crown at the central portion of the top surface of the body. The longitudinal and transverse convexing of this top surface and forming this crown provides for a maximum thickness of the sled at the center portion of the body, and both the rearward and forward portions of the sled taper to thinner sections although remaining slightly transversely convexed. The corners **14** between the sides **7** and the undersurface, are made square and comparatively sharp, being only very slight-

ly rounded, for these corners are adapted to bite into the snow. However, the corners between the sides 7 and the top surfaces are rounded on a significant radius, approaching the thickness of the sled, to eliminate any sharp edges at this top surface which might possibly cut a rider if he were to fall against an edge of the sled.

This sled is preferably a moderately thick unit and may be built of wood or from a combination of wood and plastic materials. Preferably, however, it is built by combining a core of lightweight, rigid, structural foam with an outer covering or shell of a material such as fiberglass. This foam-fiberglass construction, which can be formed by techniques well known to fabricators, is very light in weight. Thus, not only will the the sled be easy to carry, but this light weight will permit the sled to be easily handled and controlled by a rider. The rider merely shifts his weight from one position to another as is required for selected maneuvers, such as turning, traversing and stopping the sled.

Regardless of the material to be used, the sled is finished at its underside to a smooth, slick surface which will easily slide on a snow surface. On the other hand, the upper surface of the sled is desirably similar to the texture of coarse burlap to prevent the rider from slipping and to help him to stand or sit upon the sled while it is in motion.

In use of the sled, as when a rider stands upon it, he can vary its attitude in the snow and control it to make turns and the like by merely shifting his weight on the sled body. The crowned, upper surface is ideal for this purpose because the crown permits the rider to feel and sense his position on the sled whenever he is riding the sled in a standing position.

I have now described my invention in considerable detail. However, it is obvious that others skilled in the art can build and devise alternate and equivalent constructions which are nevertheless within the spirit and scope of the invention. Hence, I desire that my protection be limited, not by the construction illustrated and described, but only by the proper scope of the appended claims.

What is claimed is:

1. A device for supporting a user for sliding down a snow slope, comprising:

a single board-like member having a width for a majority of its length sufficient to accommodate both feet of a user standing thereon;

said member having an upwardly curving front end having converging sides;

said member having a bottom provided with a longitudinally extending, generally flat planar surface at each side, a longitudinally extending and laterally concave surface disposed between said flat surfaces and a longitudinally extending groove disposed centrally of said concave surface; and

said member having an upper surface which is convex in both lateral and longitudinal directions.

2. A device as defined in claim 1, wherein:

the sides of said member at the rear converge from a point spaced from the rear end to approximately the intersection of the respective outer edge of said concave surface of said bottom with the rear end.

3. A device as defined in claim 2, wherein:

said longitudinally extending, laterally concave surface extends from the rear end of said member to the underside of said upwardly curving front end.

4. A device as defined in claim 1, wherein said member comprises:

a blank formed of a material selected from wood and an expanded resin, said blank corresponding in shape and contour to said member; and

a surface covering on said blank of reinforced resin.

5. A device as defined in claim 4, wherein:

said surface covering on the top of said blank includes a fiberglass cloth of coarse weave impregnated with a resin; and

said surface coating on the bottom of said blank includes a fiberglass cloth of relatively fine weave impregnated with a resin.

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