Nov. 28, 1939. G. E. BURGESON ET AL 2,181,391

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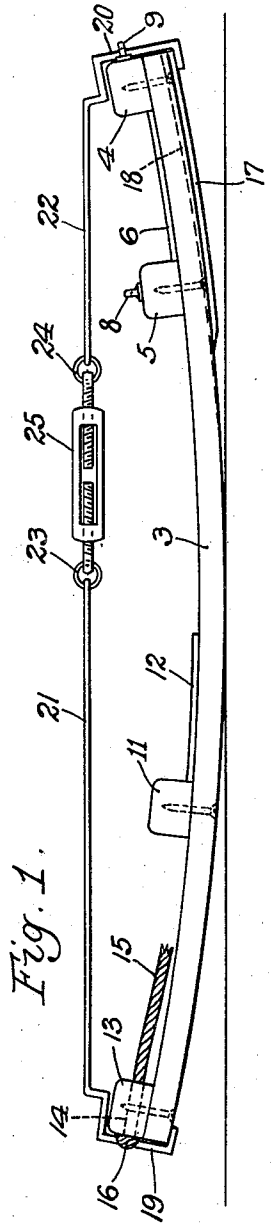


Fig. 1.

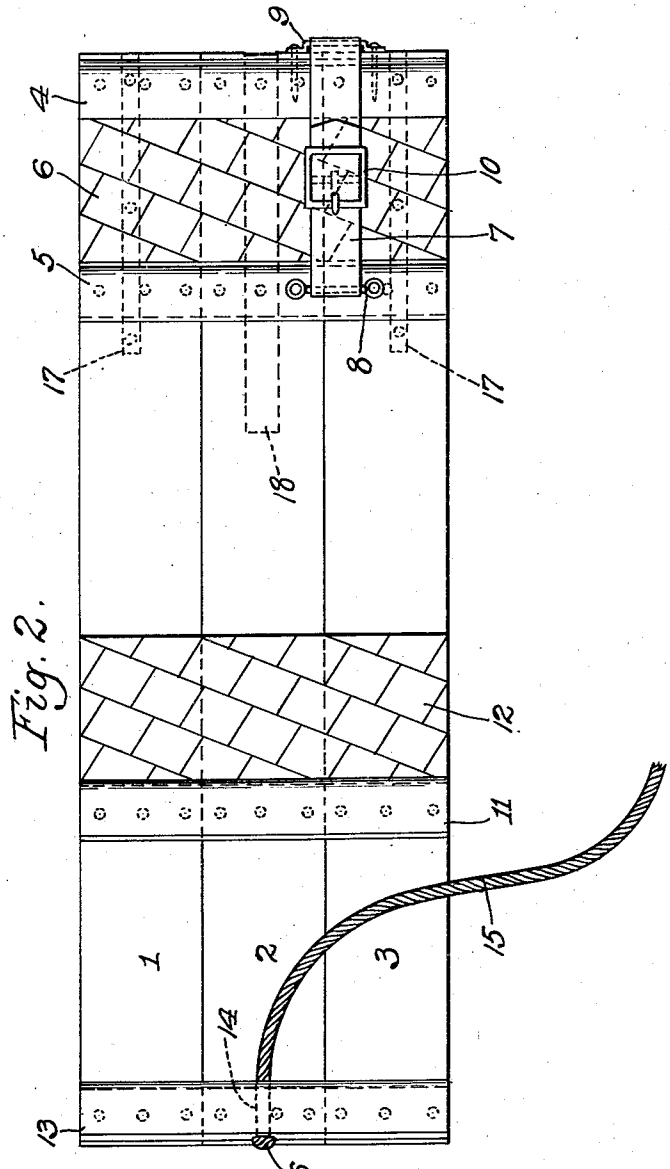


Fig. 2.

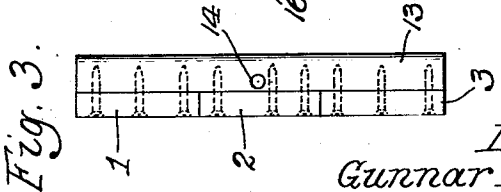


Fig. 3.

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SLED

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Application March 7, 1938, Serial No. 194,364

3 Claims. (Cl. 280—18)

Our invention relates to improvements in sleds and the like and has for one object to provide a new and improved type of sled which may be used for coasting or as a substitute for skis in jumping on snow or snow covered ground.

Our invention is illustrated more or less diagrammatically in the accompanying drawing, wherein—

Figure 1 is a side view;

Figure 2 is a plan view;

Figure 3 is an end view.

Like parts are indicated by like characters throughout the specification and claims.

Our invention comprises a curved sled preferably made up of three curved boards, 1, 2, and 3, curved uniformly from end to end. These boards are held together by four cross members. The cross members 4 and 5 at the rear of the sled have between them a layer of rubber or other suitable material 6, and a strap 7, anchored on cleats 8, on the top of the rib or cross member 5 and cleats 9 at the back of the rib 4, is provided with a buckle 10, for adjustment. This brings the strap 10, above the upper level of the floor of the sled so that the user may put his left foot on the floor 6, between the ribs 4 and 5, with the toe of his shoe under the strap 7. 11, is an intermediate cross member or rib in front of the center of the sled and immediately behind it is a rubber or suitable foot plate or floor 12. The user will put his right foot on this floor plate against the rear edge of the rib 11. 13, is a front cross rib, apertured at 14 and 15, is a control rope extending through the aperture and knotted at 16, as indicated. The user holds this rope in his hands for purposes as will hereinafter appear.

17, 17, are tracks of metal or wood on the underside of the sled. They extend from the extreme rear end forwardly to and normally terminate short of the center of the sled. 18, is a goove preferably tapering in depth from zero at its forward end to a maximum at its rear end. The grooves and runners either alone or together are used to assist in guiding the sled though under some circumstances they are not needed.

The operator stands on the sled with the plane of his body generally parallel with the axial plane of the sled, holds the control rope in his hand and steers with a drag stick similar to the drag stick used in skiing though in this case furnished only with a sharpened point and without any web. He maintains control by balancing himself on the sled assisted by the drag stick and the control rope. By increasing the tension on the control rope he raises the forward end of the sled and increases the pressure applied at the rear end. He may, if desired, exert such a high tension on the rope as to concentrate the load at the extreme rear end of the sled and so obtain a very effective braking effect. The speed at which the sled travels coasting under gravity downhill may be increased by decreasing the tension on the rope and so by decreasing the angle of the sled with respect to the ground, thus increasing the area of contact and so decreasing the friction. The cross ribs are held to the boards or planks by screws as indicated or by gluing or by any other suitable holding means. The boards are given an initial bend and in order that they may maintain that bend when not in use the tie mechanism as indicated is shown. It comprises hooks 19, 20, tension members 21, 22, screws 23, 24, and a turnbuckle 25. The hooks will be hooked over the ends of the sled, the turnbuckle tightened up to prevent straightening out of the previously bent sled members.

It will be understood that while we have illustrated an operative device, still many changes might be made in size, shape, number, arrangement and disposition of parts without departing materially from the spirit of our invention and we wish, therefore, that our showing might be taken as in a large sense diagrammatic.

We claim:

1. A sled having a smooth, unobstructed ground contacting surface continuous from end to end, a plurality of cross pieces extending the entire width of the sled and rigidly attached thereto, one of them being located at the extreme rear end, another being spaced forwardly therefrom a distance sufficient to permit the operator to place his foot between the two cross pieces and whereby the operators foot is held in a position substantially perpendicular to the longitudinal axis of the sled, a member extending parallel with and offset from the longitudinal axis of the sled, extending between the cross pieces at the rear of the sled and spaced above the upper surface of the sled thereby sufficiently to permit the operator to insert his toe beneath such longitudinal member.

2. A sled having a smooth, unobstructed ground contacting surface continuous from end to end, a plurality of cross pieces extending the entire width of the sled and rigidly attached thereto, one of them being located at the extreme rear end, another being spaced forwardly therefrom a distance sufficient to permit the operator to place his foot between the two cross pieces

and whereby the operators foot is held in a position substantially perpendicular to the longitudinal axis of the sled, a third cross piece against which the operator may press the side of his other foot located between the front of the sled and the center thereof, a member extending parallel with and offset from the longitudinal axis of the sled, extending between the cross pieces at the rear of the sled and spaced above the upper surface of the sled thereby sufficient to permit the operator to insert his toe beneath such longitudinal member.

3. A sled having a smooth, unobstructed ground contacting surface continuous from end to end, a plurality of cross pieces extending the entire width of the sled and rigidly attached thereto, one of them being located at the extreme rear end, another being spaced forwardly therefrom a distance sufficient to permit the operator to place his foot between the two cross pieces and whereby the operators foot is held in a position substantially perpendicular to the longitudinal axis of the sled, a third cross piece against which the operator may press the side of his other foot located between the front of the sled and the center thereof, a control rope attached to the front end of the sled and having a free end adapted to be grasped by the operator in balancing and manipulation of the sled, a member extending parallel with and offset from the longitudinal axis of the sled, extending between the cross pieces at the rear of the sled and spaced above the uper surface of the sled thereby sufficiently to permit the operator to insert his toe beneath such longitudinal member.

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