July 7, 1925. 1,545,013

G. W. RIEBE

TOBOGGAN SKI

Filed Dec. 17, 1923

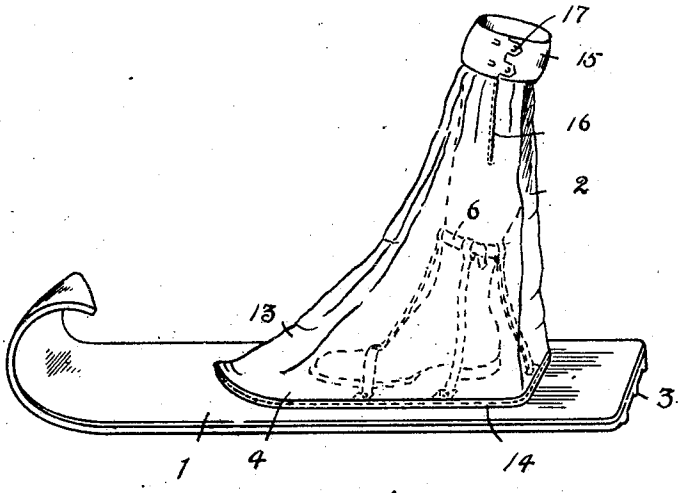


Fig. 1.

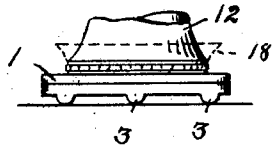


Fig. 2.

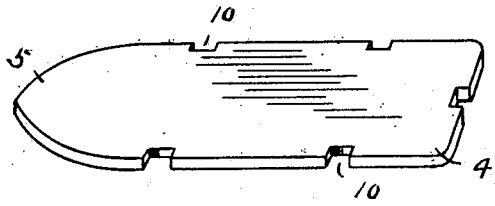


Fig. 3.

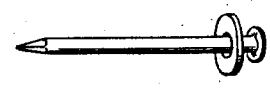


Fig. 4.

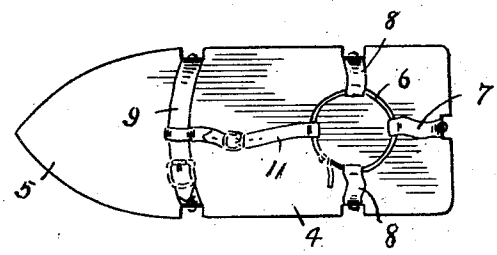


Fig. 5.

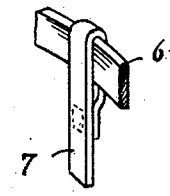


Fig. 6.

Inventor

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Patented July 7, 1925. 1,545,013

UNITED STATES PATENT OFFICE.

GUSTAV W. RIEBE, OF DULUTH, MINNESOTA.

TOBOGGAN SKI.

Application filed December 17, 1923. Serial No. 681,131.

To all whom it may concern:

Be it known that I, GUSTAV W. RIEBE, a citizen of the United States, residing at Duluth, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Toboggan Skis, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to novel means for traveling over snow; and the primary object of the present invention is to provide an improved ski so constructed as to permit of the ready manipulation thereof by the user, allowing the convenient turning around with minimum effort and without danger of the user losing his balance and falling over.

A further object of the invention is to provide an improved ski of short, wide construction, formed of laminated wood, or other suitable material; the short wide construction facilitating the manipulation of the ski as above related, and the use of a plurality of layers of material strengthening same.

Another object of the invention is the provision of longitudinally extending reinforcing beads formed on the lower surface of the ski, which prevent skidding, and also provide desirable runners for the ski when the latter is being used over hard surfaces such as ice and the like.

A further object of the invention is the provision of novel means for attaching the skis to the feet of the wearer, and novel means for entirely covering and protecting the lower portion of the legs of the wearer from the elements and to prevent the forming of balls of snow and ice between the feet and the skis.

A still further object of the invention is to provide an improved ski of the above type, which will be durable and efficient in use and of simple construction.

With these and other objects in view, the invention consists in such novel construction, arrangement and formation of parts, as will be hereinafter more fully described, claimed, and illustrated in the accompanying drawings, in which drawings:

Figure 1 is a perspective view of one of the improved skis as applied to the foot and leg of the wearer;

Figure 2 is a rear end elevation of the ski with a portion of the foot and leg shield broken away;

Figure 3 is an enlarged perspective view of the foot board;

Figure 4 is a perspective view of one of the strap holding nails;

Figure 5 is a top plan view of the foot board with the foot bridle attached; and

Figure 6 is an enlarged perspective view of one of the bridle strap connections.

Referring to the drawings in detail, wherein similar reference characters designate corresponding parts throughout the several views, the improved ski comprises the flat body portion 1, which is preferably formed of wooden material, as clearly shown in Figures 1 and 2 of the drawings. The extreme forward end of the ski is upturned, as at 2, so as to facilitate the traveling of the user of the ski over a snow surface.

The lower surface of the body portion 1 is provided with a plurality of spaced longitudinally extending ribs 3 which form means for reinforcing the body, as well as prevent skidding. These ribs 3 will also form runners for the ski when used over a hard surface such as ice or the like.

A foot plate 4, formed preferably of soft wood, is secured to the upper surface of the body 1, and the foot of the user is adapted to rest directly upon the upper surface thereof. The forward end of the foot plate 4 is pointed, as at 5, so as to avoid snow gathering on the top portion of the body 1 during the use of the ski. The foot of the user is preferably held on the foot plate 4 by the use of an adjustable ankle strap 6, to which is connected a heel strap 7, side straps 8 and a toe strap 9. The lower ends of the heel strap 7, the side straps 8 and toe strap 9 are secured in suitable notches 10 formed in the marginal edges of the foot board 4, either by nails, screws, or the like. An additional adjustable strap 11 connects the straps 6 and 9 over the center of the foot.

In order to protect the lower portions of the wearer's legs from the elements, a bell shaped covering 12 is provided. This cover 12 is preferably formed of moisture-proof material and can be constructed of woolen cloth, rubber, canvas, leather, or any other suitable material, and includes an enlarged flowing skirt portion 13, the lower edges of which are snugly fastened as at 14, or other-

wise secured to the marginal edges of the foot board 4. The upper end of the cover 12 terminates in a leg band 15, it being slit as at 16 to facilitate the placing of the foot within the cover, or if preferred a draw string may be used as a fastening means. The terminals of the leg band 15 can be connected in any preferred way, as indicated at 17.

It is obvious that the cover 12 will fully protect the lower portion of the user's legs from the elements and will keep the foot in a warm and dry condition, thus effectively avoiding the forming of balls of snow and ice under the foot.

The straps 7, 8, and 11, are preferably loosely attached about the ankle strap 6 as clearly shown in Figure 6 of the drawings, and these straps, together with the ankle and toe straps 6 and 9, form a convenient and secure bridle attachment for the foot; it being noted that by this attachment extending upwardly to the ankle exceptionally free movement of the foot is permitted without in any way resulting in a clamped positioning thereof, and when the foot is raised the ski will be suspended by the bridle normally assuming a straight axial line with the foot, which materially assists in walking.

When the improved foot board and boot is used upon a narrow common ski, it may be desirable to make the same considerably thicker than that illustrated in the drawings, except as shown in dotted lines at 18, Figure 2, when the edges thereof may be considerably flared outwardly to prevent the climbing of snow upon the foot.

In applying my improved ski to the foot it is obvious that the covering or boot together with the bridle internally thereof will lie prone upon the ski, and the foot may be readily applied through the open end of the boot and the bridle properly fastened, when the boot is pulled up and attached to the leg. While I have shown this attachment as occurring above the knee of the wearer it is apparent that the same may be modified to cover a lesser or greater portion of the limbs as desired.

It is apparent also that a modified form of the device may be employed to advantage in the navigating of mucky or wet lands, for example that encountered in the growing of certain crops such as cranberries or the like, where one is apt to sink deeply in same without some form of increased tread surface.

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

1. A toboggan ski including a flat body of short length and relatively great width, a pointed foot board secured to the upper surface of the body, considerably wider than the user's foot but less in width than the ski, notches within the marginal edges of the foot board, an ankle strap for adjustable engagement about the ankle of the wearer, toe straps the termini of which are fixed within two opposed notches in the foot board, heel and side straps leading from the ankle strap to the other notches in the foot board, and an adjustable strap leading from the ankle strap to the toe strap.

2. A toboggan ski including a flat body of short length and relatively great width, a pointed foot board secured to the upper surface of the body, considerably wider than the wearer's foot but less in width than the ski, notches within the marginal edges of the foot board, an ankle strap for adjustable engagement about the ankle of the wearer, toe straps the termini of which are fixed within two opposed notches in the foot board, heel and side straps leading from the ankle strap to the other notches in the foot board, an adjustable strap leading from the ankle strap to the toe strap, and a protecting boot wholly surrounding the foot of the wearer the lower end being rigidly fixed to the marginal edges of the foot board, and the upper end adjustably attached to the leg of the wearer.

3. The combination with a ski having a foot attaching bridle and a protecting boot surrounding same, of means forming a portion of said bridle and attached about the ankle of the wearer permitting of free angular movement of the leg of the wearer in respect to the ski when in use and normally holding the ski in proper alignment with the foot.

4. The combination with a ski having a foot bridle and protecting boot thereabouts, of an adjustable strap about the upper end of the boot forming the upper end of a vertically disposed opening longitudinally of the boot, substantially as and for the purpose described.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

GUSTAV W. RIEBE.

Witnesses:
S. C. BRONSON,
S. GEO. STEVENS.