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ARTIFICIAL SKIING MAT

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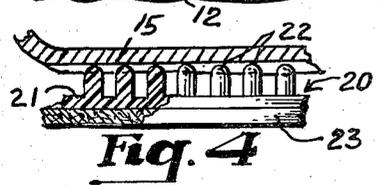
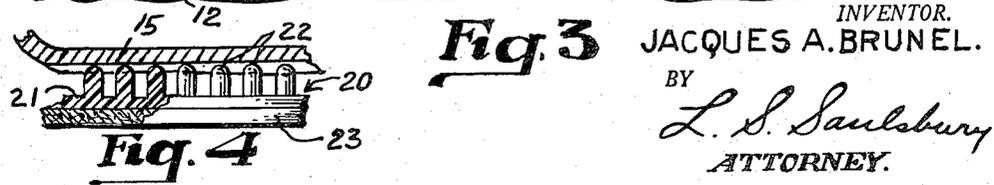
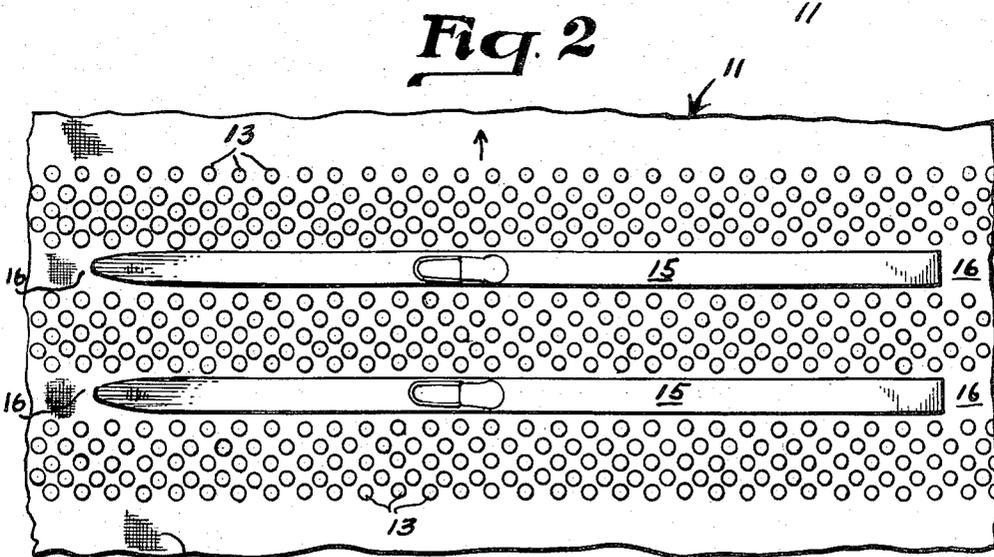
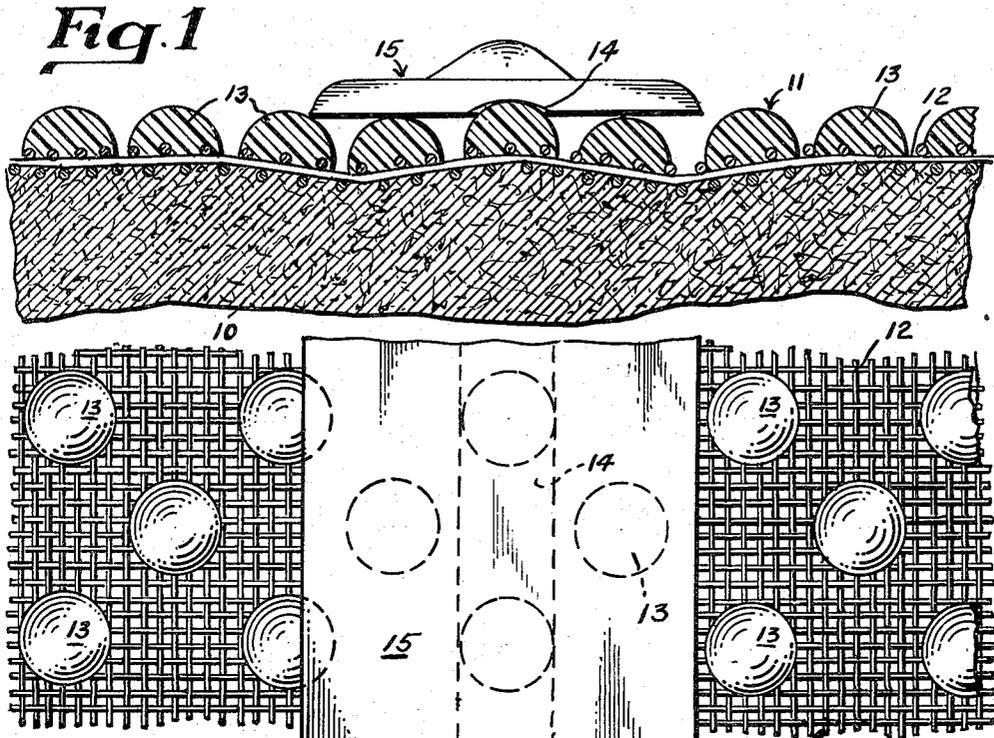


Fig. 3

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ARTIFICIAL SKIING MAT

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2 Claims. (Cl. 272—56.5)

This invention relates to an artificial skiing mat.

It is the principal object of the present invention to provide a skiing mat which is so constructed that control of the skis may be maintained throughout the descent of the skier downwardly thereover.

It is another object of the invention to provide a skiing mat which will conform to the contour of the ground or supporting surface yet provide at the same time hard upstanding projections adapted to enter the central groove of the ski and that are so spaced that similar rows of projections are within the confines of the ski edges so that the ski is also supported on the ends of projections against lateral tilting and wherein the supporting web fabric or base and the hard projections may flex upon being supported upon a soft straw bed or the like whereby the ski may be well retained against lateral pressure and at the same time cause the projections to enter the ski groove.

It is still another object of the invention to provide a skiing mat having hard projections running throughout the length of the mat but wherein transversely-extending spacings are provided longitudinally of the mat to allow the skier to ascend the mat by side stepping with the skis in the transversely-extending spaces.

Other objects of the invention are to provide a skiing mat having the above objects in mind which is of simple construction, easy to apply to the ground surface, light in weight, portable, of pleasing appearance, will withstand weather conditions, is non-injurious to the skiers, has long life, and is effective and efficient in use.

For other objects, and for a better understanding of the invention, reference may be had to the following detailed description taken in connection with the accompanying drawing, in which

Figure 1 is an enlarged fragmentary transverse sectional view of the skiing mat and the supporting straw, with a ski supported thereover so that a row of projections are aligned with the groove of the ski and the ski weighted upon adjacent rows of projections at the opposite sides thereof,

Fig. 2 is a fragmentary top plan view of the ski and mat,

Fig. 3 is an enlarged fragmentary plan view of the mat showing the transversely-extending spacings with the skis therein illustrating thereby the manner in which the skiing mat may be ascended by side stepping with the skis, and

Fig. 4 is a fragmentary vertical sectional view of a modified skiing mat construction employing elongated rigid hard projections rounded on their upper ends to enter the ski groove and joined by an integral bottom web or base portion of only slight flexibility to allow only slight deflection for the accommodation of the control projections within the groove.

Referring now particularly to Figs. 1 to 3, 10 represents a mass of straw which is thrown over the ground surface and upon which a skiing mat indicated generally at 11 is placed. This mat is made of a netting 12 on which are rigidly formed and secured rounded hard projections 13 adapted to enter central groove 14 of a ski

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15. These projections 13 are spaced in longitudinally-extending rows of such distances that while a center row is confined to the central groove 14 of the ski the adjacent rows running therewith will lie under the sides of the ski and provide thereby a triple row support for the ski at all times. Since the web or mat 12 is flexible the projections at the opposite sides of the groove will be depressed as illustrated in Fig. 1 at least an amount corresponding to the depth of the groove. The rows of projections are spaced apart less than one half the width of the ski so that the ski at all times spans three rows of projections. A ski runs about three inches in width. The ski is accordingly held against lateral displacement by the projections which follow the groove and the steadying lateral support of the ski will be primarily maintained by the rows of projections laterally spaced therefrom. The individual projections of the adjacent rows are respectively staggered and alternately arranged with respect to each other to give more effective support for the ski.

The rows of projections need not be fully continuous throughout the length of the mat but may provide for transversely extending spacings 16 longitudinally spaced therealong as shown in Fig. 3 whereby the undersurface of the ski may engage areas of the mat base and where there are no projections so as to allow the skis 15 to be supported on the mat and the skier by side stepping motion allowed to ascend the mat to the elevated areas thereon.

The projections 13 are preferably half spherical shape and may be formed of plastic, glass or aluminum and are rigidly secured to the mat base or netting 12. The projections themselves are non-depressible and any depressibility of the projections is permitted through the netting. It should be understood the netting can be of any form and made of any type of flexible material such as canvas or similar fabric.

In forming this particular mat, a mold is provided having a plurality of depressions in the top surface thereof. The base netting 12 is extended over the mold surface and thereafter a cold setting plastic mass is passed into the depressions through the netting and allowed to accumulate on the netting sufficiently to provide when set a rigid connection with the netting material and its threads embedded in the projection material.

The netting is sufficiently pliable and flexible so the aligned projections can be maintained in the groove. The netting is also sufficiently rigid to prevent its expansion or the separation of the projections from the ski. With the upper ends of the projections being rounded and of harder material than the skis the skis will pass freely over them. The skis will run over a point on the surface of the rounded projection so that there is only line contact of the ski with the projection.

In Fig. 4, there is shown a slightly modified construction of the invention in which a molded form of web and projections is used. The web and the projections become a substantially rigid integral mass with the projections hard and the web yielding only sufficiently to allow the row of projections to enter the groove. This mass is indicated generally at 20 and has a web 21 and projections 22. The bottom of the web can be rested upon a yieldable strip 23 of compressible material such as sponge rubber sheet, straw mass, or loose yieldable meshed particles. At no time do the projections yield sufficiently to bend from the web base. The end surfaces of the projections maintain their contact with the ski and the ski surfaces slide in aligned contact over the ends of the projections.

It should now be apparent that there has been provided a skiing mat which can be placed over an inclined surface and over which the skier and skis may pass with equal agility as he may pass through a snow covered skiing slope.

It should also be apparent that there has been provided

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a skiing mat construction, which is simple, inexpensive to manufacture, light in weight, durable, portable, and effective in use.

While various changes may be made in the detailed construction, it shall be understood that such changes shall be within the spirit and scope of the present invention.

What is claimed is:

1. An artificial skiing mat comprising a pliable web base and hard and non-depressible projections rigidly secured to and projecting upwardly from the pliable web base, said projections being arranged in rows, one row adapted to enter the central groove of a ski and adjacent rows spaced laterally from the one row on the opposite sides thereof less than half the width of the ski to provide supports for the sides of the ski while the ski is traversing the projections of one row aligned with the ski groove, said rows of projections being spaced from each other so that at least three rows are always in contact with the bottom surface of the ski as to its lateral dimension, the individual projections of the respective adjacent rows being staggered and in alternate arrangement with one another, and transversely-extending spacings providing gaps in the rows of projections and sufficiently wide to allow a ski to be placed transversely thereover free of the projections and being longitudinally spaced from one another to permit the skier to straddle the spacings with the skis by side stepping to ascend the ski slope.

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2. An artificial skiing mat comprising a pliable web base and hard and non-depressible projections rigidly secured to and projecting upwardly from the pliable web base, said projections being arranged in rows, one row adapted to enter the central groove of a ski and adjacent rows spaced laterally from the one row on the opposite sides thereof less than half the width of the ski to provide supports for the sides of the ski while the ski is traversing the projections of one row aligned with the ski groove, said rows of projections being spaced from each other so that at least three rows are always in contact with the bottom surface of the ski as to its lateral dimension, and said web base and said projections being integrally molded to one another with the web being substantially self-supporting with the web being depressible only by virtue of the flexibility of the pliable web mass.

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