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LAMINATED SKI

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Fig. 1

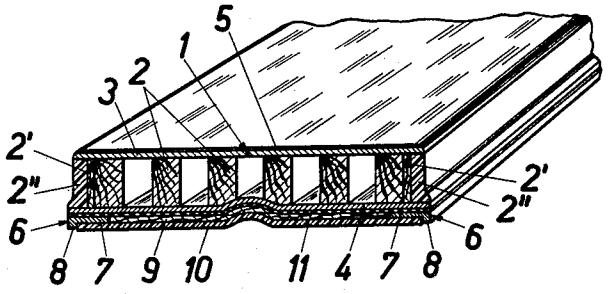
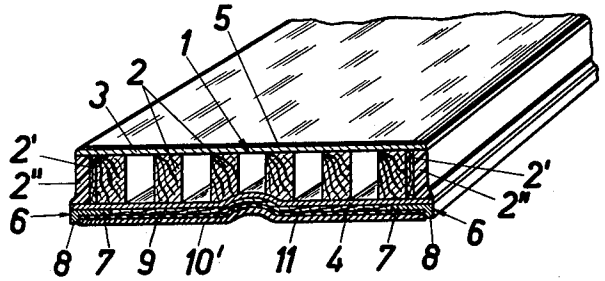


Fig. 2



INVENTOR.

JOSEF FISCHER

BY

Imirie & Smiley

ATTORNEYS

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LAMINATED SKI

Josef Fischer, 16 Ahornweg, Ried Innkreis, Austria

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3 Claims. (Cl. 280—11.13)

This invention relates to a ski, preferably a laminated ski, which consists substantially of upper and lower facing sheets of metal and an intervening core layer of wood or plastic.

A feature of the invention resides in a ski including a core covered by upper and lower facing sheets of metal, one edge strip of steel secured along each bottom edge of said lower facing sheet, a coating on the bottom of the ski filling the spacing between the edge strips, and a covering of a material of high toughness on one of those horizontal surfaces of the two edge strips which are disposed inside the ski.

A further feature of the invention resides in a ski including a core material covered by upper and lower facing sheets of metal, one edge strip of steel secured along each bottom edge of said lower facing sheet, said strip extending integrally substantially throughout the length of the ski and consisting of an angle section having one flange extending parallel to the facing sheets of metal and being secured to the bottom edge of said lower facing sheet, the other flange extending substantially at right angles to the first-mentioned flange and having a vertical outside surface disposed in the lateral boundary surface of the ski, a tread on the bottom of the ski filling at least the space defined by the vertical flanges of the edge strips, and a covering of a material of high toughness on one of the horizontal surfaces of that flange of the strips which extends parallel to the facing sheets.

Finally, a feature of the invention resides in a ski including a core covered by upper and lower facing sheets of metal, one edge strip of steel secured along each bottom edge of said lower facing sheet, said strip extending integrally substantially throughout the length of the ski and consisting of an angle section having one flange extending parallel to the facing sheets of metal and being secured to the bottom edge of said lower facing sheet, the other flange extending substantially at right angles to the first-mentioned flange and having a vertical outside surface disposed in the lateral boundary surface of the ski, a wooden layer filling the space defined by those flanges of the edge strips which are parallel to the facing sheets, a tread on the bottom of the ski filling the space defined by the vertical flanges of the edge strips, said tread covering the downwardly facing surfaces of the flange extending parallel to the facing sheets, and a covering of rubber on the upper horizontal surface of said flange, said rubber covering extending throughout the width of the ski and being bonded by vulcanization to the parts adjoining it.

Two illustrative embodiments of the ski according to the invention are shown in transverse sectional views in FIGS. 1 and 2.

1 is the core of the ski, which consists of spaced wooden bars 2 standing on edge and extending in the longitudinal direction of the ski. The core 1 of the ski is covered on its sides by a thin layer 2′ of wood and a thicker layer 2″ of plastic and at the top and bottom by thin sheets of metal 3 and 4, respectively, the upper sheet 3 carrying a thin plastic covering 5. Integral edge strips 6 of steel extending along the lateral longitudinal edges of the lower facing sheet 4 consist of angle sections having two flanges 7, 8, which are substantially at right angles to each other. The vertical flange 8 lies in the lateral boundary surface of the ski and the flange 7 extending parallel to the facing sheets is connected to the lower facing sheet 4. A wooden layer 9 is provided, which is adjoined by the inner vertical faces of the horizontal flanges 7 and extends parallel to the lower facing sheet 4. The space between the vertical flanges 8 of the edge strips 6 is filled by a plastic tread covering 10, which covers the underside of the flanges 7.

In the ski body shown in FIG. 1, a layer 11 of a material of high toughness, such as crude rubber, is provided between the flanges 7 of the edge strips 6 and the adjoining layer 9 of wood, on the one hand, and the facing sheet 4, on the other hand, and is connected, e.g., by vulcanizing, to the adjoining parts of the ski, such as the layer 9 of wood, the facing sheet 4 and the edge strips 6. This layer may be very thin and may extend throughout the width of the ski and in a length which is at least equal to the length of the edge strips. This layer 11 has the function of damping the vibrations which are due to the fact that the edge strips consist of very hard material so that none of these vibrations or only an insignificant part thereof is transmitted to the ski body. Besides, this layer enable a slight relative displacement of the parts connected to it on both sides, so that a differential expansion of the parts cannot strain the ski body.

This damping layer 11 consisting of a material of high toughness may be disposed in a position other than that shown in FIG. 1. For instance, particularly when a tread 10′ of aluminum having a hard anodized coating is used rather than a plastic tread covering, the layer 11 may be disposed according to FIG. 2 between that surface of the flange 7 of the edge strips which faces the tread 10′ and that surface of the wooden layer 9 which faces in the same direction, on the one hand, and the tread 10′, on the other hand.

Any other medifications are possible, of course. For instance, it is sufficient to provide the layer 11 adjacent to the edge strips on either side of the flange 7 thereof and of the layer 9 of wood or in another position; it may adhere to both parts to be connected, as will be the case when it consists of rubber and is vulcanized, or it may be secured with an adhesive to the parts to be connected.

The measure adopted according to the invention does not reduce the elasticity of the ski and will cause any vibrations occurring to be suppressed before they have propagated throuhgout the ski.

What is claimed is:

1. In a ski including a core covered by upper and lower facing sheets of metal, the improvements comprising a strip of steel disposed along each bottom edge of said lower facing sheet and having an exposed portion at the outside, a layer on the bottom of the ski fillling the space between the exposed portions of the edge strips and forming a running surface, and a layer of rubber-like material of high toughness disposed between and securing said edge strips to said lower facing sheet to resiliently absorb and dampen transfer of shocks received by said exposed portions of the edge strips.

2. In a ski including a core material covered by upper and lower facing sheets of metal, the improvements comprising one edge strip of steel disposed along each bottom edge of said lower facing sheet, each said strip extending substantially the length of the ski and being formed with an angle section having one flange parallel to the lower facing sheet and the other flange extending

substantially at right angles to the first-mentioned flange and having a vertical outside surface disposed in the lateral boundary surface of the ski, a tread on the bottom of the skil fillling at least the space defined by the vertical flanges of the edge strips, and a layer of rubberlike material of high toughness disposed between and securing said strips to said lower facing sheet.

3. The improvements in a ski according to claim 2 wherein a layer of wood fills the space defined by those flanges of the edge strips which are parallel to the facing sheet, and said layer of rubberlike tough material is formed of rubber bonded by vulcanization to said lower facing sheet, said parallel flanges of the edge strips, and said layer of wood.

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A. HARRY LEVY, *Primary Examiner.*

EARL M. BERGERT, *Examiner.*