

Nov. 7, 1944.

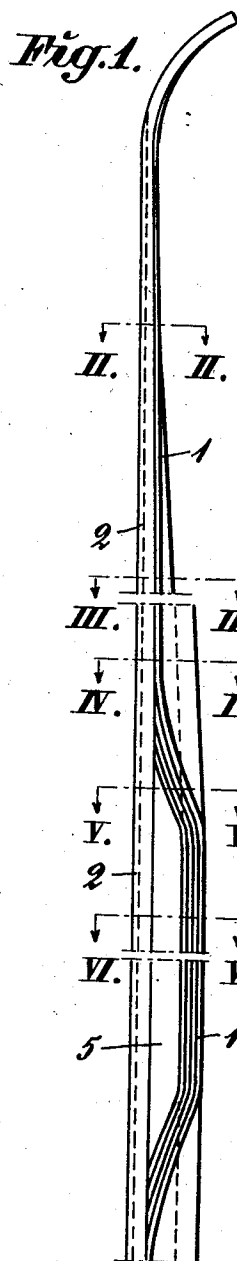
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2,362,380

SKI

Filed April 5, 1943

2 Sheets-Sheet 1



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Fig. 7. Fig. 8.

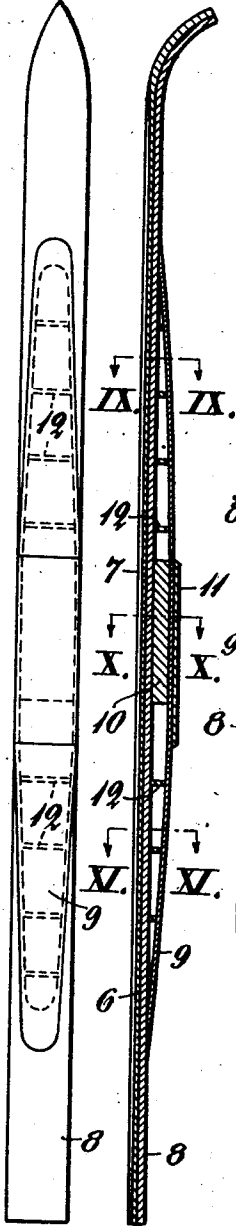


Fig. 12. Fig. 13.

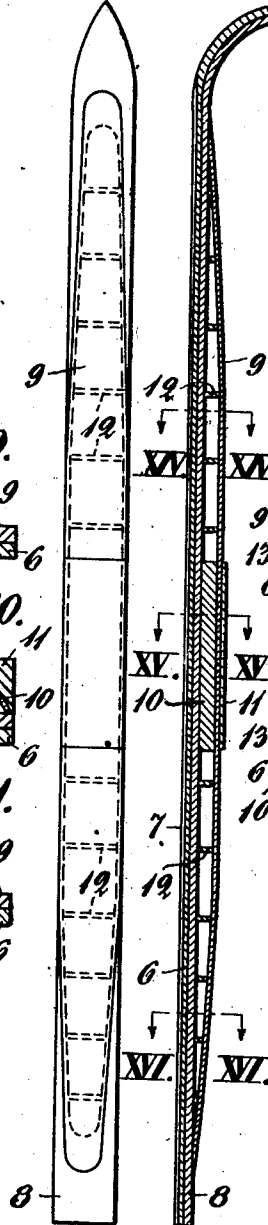


Fig. 9.



Fig. 10.

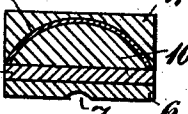


Fig. 11.

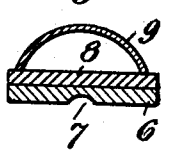


Fig. 14.

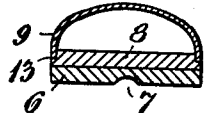


Fig. 15.

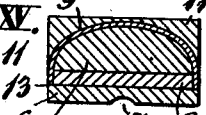
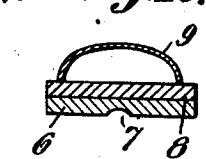


Fig. 16.



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SKI

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11 Claims. (Cl. 280—11.13)

The present invention relates to an improved ski of wood. The object of the invention is to produce a light ski and to reduce considerably the quantity of the special, selected skiwood that is available now only with difficulty.

The invention is essentially characterized by the feature that the ski comprises a ski body consisting of at least one layer of wood, a stiffening member consisting of at least one layer of wood which member is bent to a channel-shaped cross-sectional form and glued to the upper side of the ski body, a plane foot-plate of wood glued to the upper side of or formed by a portion of the stiffening member, and a wooden strengthening piece inserted into the space between the stiffening member and the ski body beneath the foot-plate.

Three embodiments of the ski according to the invention are illustrated on the accompanying drawings.

Fig. 1 shows an embodiment of the middle and fore part of the ski in a side-view.

Figs. 2-6 are sections along the lines II—II, III—III, IV—IV, V—V, and VI—VI respectively in Fig. 1.

Fig. 7 is a plan view of a second embodiment of the ski. Fig. 8 is a longitudinal sectional elevation of the same ski.

Figs. 9-11 are sections along the lines IX—IX, X—X, and XI—XI respectively in Fig. 8.

Figs. 12 and 13 show a plan view and a longitudinal sectional elevation respectively of a third embodiment of the ski.

Figs. 14-16 are sections along the lines XIV—XIV, XV—XV, and XVI—XVI respectively in Fig. 13.

In Figs. 1-6, 1 is the stiffening member, which is glued to the ski body 2, which may be provided in the known way with a guiding groove 3. At the place for the foot-plate of the ski, the stiffening member may be plain in its whole width, as shown on the drawings, so that the stiffening member forms the foot-plate at said place.

The channel-shaped cavity 4 formed between the ski body 2 and the stiffening member 1 is filled by a filling-piece 5 beneath the foot-plate. As shown in Figs. 2-6, the stiffening member 1 is formed in such a way that the depth of the channel space decreases in the direction towards the ends of the member which terminate in a plane plate-like portion.

In the embodiment according to Figs. 7-11, 6 designates the layer forming the gliding surface of the ski. It is provided with a guiding groove 7 in the usual way. A second layer 8 of the same or another kind of wood than the layer 6 is glued to the upper side of the layer 6. A stiffening member 9 consisting of several layers is glued to the upper side of the layer 8. This stiffening

member 9 has a channel-shaped cross-section and extends along nearly $\frac{2}{3}$ of the length of the ski. At the place where the foot-plate is to be fixed, a filling-piece 10 is suitably provided between the stiffening-member 9 and the layer 8. This filling piece 10 is somewhat shorter than the foot plate 11, which is flat on its upper side and has a rectangular cross-section.

Its underside is formed in such a way that it coincides exactly with the form of the channel-shaped stiffening member 9, to which it is directly glued. In order to resist arising strains several transverse intermediate walls 12 are suitably inserted in the stiffening member as shown on the drawings.

The ski according to Figs. 12-16 differs from the above described embodiment by the feature that the stiffening member 9 consisting of several layers extends along a greater portion of the length of the ski. Also the fastening of the stiffening member 9 is a little different. As shown in Figs. 14-16 the upper layer 8 is provided on its longitudinal side-edges with a groove or recess 13, which in the middle portion of the ski passes through the whole layer 8, the surface of the longitudinal side ends of the stiffening member 9 lying there flush with the longitudinal side edges of the ski, as Figs. 14 and 15 illustrate. However, this groove 13 decreases in the direction towards the ends of the ski and terminates somewhat before the rear and fore ends of the stiffening member. By means of this arrangement a considerably better glue-connection between the stiffening member and the ski body is attained, as will be seen from Figs. 14 and 15. In this embodiment the filling piece 10 is longer so that it extends below the whole foot plate 11 and further strengthens the ski.

Otherwise the ski according to this embodiment is formed in the same way as the ski according to Figs. 7-11, and the same references are used for the same parts of the ski.

The described embodiments are only chosen as examples and it is understood that the present invention may be modified in many ways without departing from the principal idea of the invention.

Thus, for instance, the supporting intermediate walls 12 may be replaced by ribs glued to the inner side of the stiffening member and, if desired, also to the layer 8.

Having now particularly described the nature of our invention and the manner of its operation what we claim is:

1. A ski, comprising a ski body consisting of at least one layer of wood, a stiffening member consisting of at least one layer of wood, said stiffening member being bent to a channel-shaped cross-sectional form and being glued to the upper side of said ski body, a plane foot-plate of

wood, said foot-plate being formed by a portion of said stiffening member, and a wooden strengthening piece, said strengthening piece being inserted into the space between said stiffening member and said ski beneath said foot-plate.

2. A ski, comprising a ski body consisting of several layers of wood glued together, a stiffening member consisting of several layers of wood glued together, said stiffening member being bent to a channel-shaped cross-sectional form and being glued to the upper side of said ski body, a plane foot-plate of wood, said foot-plate being formed by a portion of said stiffening member, and a wooden strengthening piece, said strengthening piece being inserted into the space between said stiffening member and said ski body beneath said foot-plate.

3. A ski, comprising a ski body consisting of at least one layer of wood, a stiffening member consisting of at least one layer of wood, said stiffening member being bent to a channel-shaped cross-sectional form and being glued to the upper side of said ski body, a plane foot-plate of wood, said foot-plate being glued to the upper side of said stiffening member, and a wooden strengthening piece, said strengthening piece being inserted into the space between said stiffening member and said ski body beneath said foot-plate.

4. A ski, comprising a ski body consisting of several layers of wood glued together, a stiffening member consisting of several layers of wood glued together, said stiffening member being bent to a channel-shaped cross-sectional form and being glued to the upper side of said ski body, a plane foot-plate of wood, said foot-plate being glued to the upper side of said stiffening member, and a wooden strengthening piece, said strengthening piece being inserted into the space between said stiffening member and said ski body beneath said foot-plate.

5. A ski, comprising a ski body consisting of at least one layer of wood, a stiffening member consisting of at least one layer of wood, said stiffening member being bent to a channel-shaped cross-sectional form and being glued to the upper side of said ski body, a plane foot-plate of wood, said foot-plate being formed by a portion of said stiffening member, a wooden strengthening piece, said strengthening piece being inserted into the space between said stiffening member and said ski body beneath said foot-plate, and supporting intermediate wooden members, said members being arranged in the transverse direction of the ski and fixed between said stiffening member and said ski body.

6. A ski, comprising a ski body, consisting of at least one layer of wood, a stiffening member consisting of at least one layer of wood, said stiffening member being bent to a channel-shaped cross-sectional form and being glued to the upper side of said ski body, a plane foot-plate of wood, said foot-plate being glued to the upper side of said stiffening member, a wooden strengthening piece, said strengthening piece being inserted into the space between said stiffening member and said ski body beneath said foot-plate, and supporting intermediate wooden members, said members being arranged in the transverse direction of the ski and fixed between said stiffening member and said ski body.

7. A ski, comprising a ski body consisting of at least one layer of wood, a stiffening member consisting of at least one layer of wood, said stiff-

ening member being bent to a channel-shaped cross-sectional form and being glued to the upper side of said ski body, recesses formed along the longitudinal edges of said ski body, said stiffening member fitting in said recesses, a plane foot-plate of wood, said foot-plate being formed by a portion of said stiffening member, and a wooden strengthening piece, said strengthening piece being inserted into the space between said stiffening member and said ski body beneath said foot-plate.

8. A ski, comprising a ski body consisting of at least one layer of wood, a stiffening member consisting of at least one layer of wood, said stiffening member being bent to a channel-shaped cross-sectional form and being glued to the upper side of said ski body, recesses formed along the longitudinal edges of said ski body, said stiffening member fitting in said recesses, a plane foot-plate of wood, said foot-plate being glued to the upper side of said stiffening member, and a wooden strengthening piece, said strengthening piece being inserted into the space between said stiffening member and said ski body beneath said foot-plate.

9. A ski, comprising a ski body consisting of at least one layer of wood, a stiffening member consisting of several layers of wood glued together, said stiffening member being bent to a channel-shaped cross-sectional form and being glued to the upper side of said ski body, recesses formed along the longitudinal edges of said ski body, for receiving the longitudinal side ends of said stiffening member, the surfaces of said longitudinal side ends lying flush with the longitudinal side edges of said ski at least in the middle part thereof, a plane foot-plate of wood, said foot-plate being formed by a portion of said stiffening member, and a wooden strengthening piece, said strengthening piece being inserted into the space between said stiffening member and said ski body beneath said foot-plate.

10. A ski, comprising a ski body consisting of at least one layer of wood, a stiffening member consisting of several layers of wood glued together, said stiffening member being bent to a channel-shaped cross-sectional form and being glued to the upper side of said ski body, recesses formed along the longitudinal edges of said ski body, said stiffening member fitting in said recesses, a plane foot-plate of wood, said foot-plate being glued to the upper side of said stiffening member, and a wooden strengthening piece, said strengthening piece being inserted into the space between said stiffening member and said ski body beneath said foot-plate, said recesses decreasing in depth from the site of said foot-plate towards the fore and rear ends of said stiffening member and terminating therefore.

11. A ski, comprising a ski body consisting of at least one layer of wood, a stiffening member consisting of at least one layer of wood, a plane foot-plate, said stiffening member being bent to a channel-shaped cross-sectional form before and behind said foot-plate, said foot-plate being formed by a plane portion of said stiffening piece between said channel-shaped portions of said stiffening member, and a wooden strengthening piece, said strengthening piece being inserted into the space between said plane portion of said stiffening member and said ski body beneath said foot-plate.

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