May 10, 1949. O. S. RUUD 2,469,478

SKI BINDING

Filed May 28, 1946

Fig. 1.

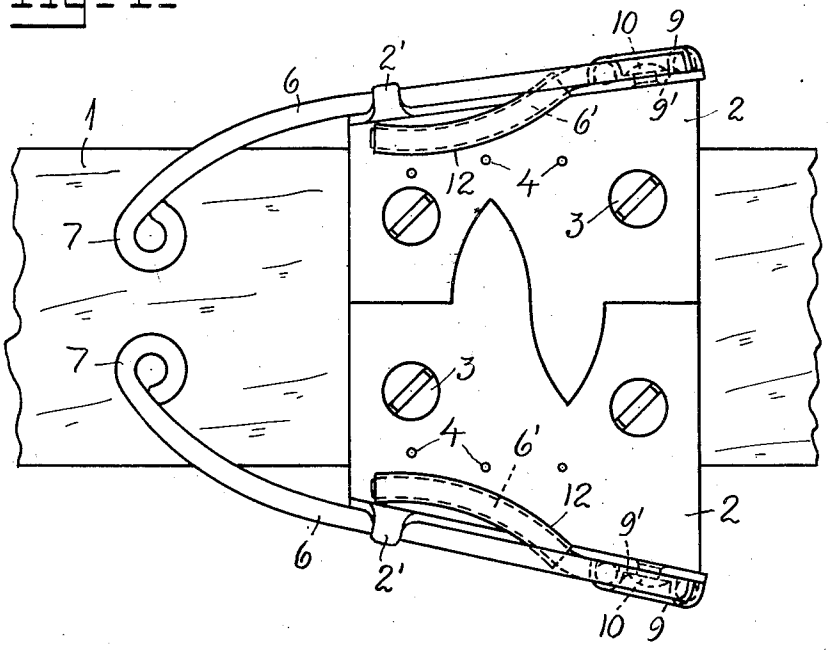
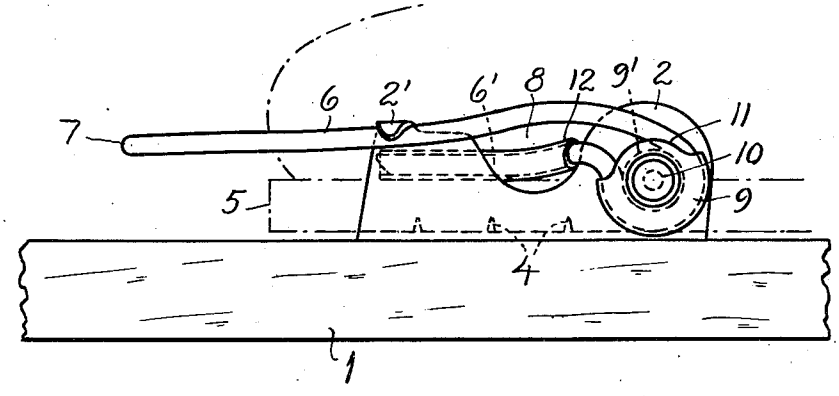


Fig. 2.



Inventor
O. S. Ruud
By Glascock Downing & Seebold
Attys

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SKI BINDING

Otto Severin Ruud, Oslo, Norway

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3 Claims. (Cl. 280—11.35)

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The present invention relates to an improvement in ski bindings of the type comprising toe irons secured to the upper side of the ski, points or spikes protruding from the horizontal part of said irons and adapted for introduction into holes in the lower side of the boot sole, clamping pieces acting on the edge portions of the boot sole and means for pressing said clamping pieces against the sole in order to grip the boot firmly in position between the toe irons.

One object of the invention is to arrange means for individual depression of the clamping pieces and to shape said means so as to become springy whereby the clamping pieces in an easy manner may be pressed against the boot sole with the pressure sufficient for holding the boot in the desired position.

Another object is to provide the toe irons proper with locking means by which the springy means, acting on the clamping pieces, may be locked in depressed position.

The invention consists broadly in that each of the clamping pieces and the means for depression of the same are formed integral from a spring wire, which is pivoted on the outer side of the toe iron, the portion of said wire constituting the clamping piece, is passed to the inner side of said iron in position above the edge portion of the boot sole when placed between the irons while the other portion, constituting a clamping arm, extends along the outer side of the iron in such a length that the free end thereof, which is bent into a loop acting as a grip, protrudes in front of the iron.

In order that the invention may be more clearly understood an embodiment thereof is illustrated as an example in the accompanying drawing, in which

Figure 1 is a plan view of a ski binding constructed in accordance with the invention, and

Figure 2 is a side view thereof.

In the drawing 1 denotes the ski and 2 the toe irons which are secured to the upper side of the ski by means of screws 3. The horizontal portions of the toe irons are provided with points or spikes 4 adapted to be introduced into corresponding holes in the lower side of the boot sole 5.

On the outer side of each of the vertical portions of the toe irons and swingably in the longitudinal direction of the ski is secured a clamping arm 6 of spring wire which arm, having its pivot placed at the rear part of the iron, is of such a length that the free end thereof which is bent into a loop 7 acting as a grip, protrudes in front of the iron.

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The arm 6 is bent around a cylindrical depression 9' of a cap-like member 9 and is provided with an extension 6' which, through a cut away portion 8 in the vertical portion of the toe iron, is passed to the inner side thereof and thereafter forwardly in position above the edge portion of the boot sole 5 so that it may be pressed elastically against said edge portion when the arm 6 is pressed downwardly.

The cap-like member 9, which is secured rotatably to the toe iron by means of a rivet 10 through the bottom of the depression 9' thereof, encloses a loop on the wire constituting the connection between the arm 6 and the extension or arm 6', and is provided with a cut away portion 11 through which the wire is passed.

In order to hold the arm 6 in depressed position the toe irons are provided with hooks 2' which preferably are formed integral with the irons and below which the arms 6 may be inserted.

The extension or arms 6' acting as clamping pieces which are to be pressed against the boot sole, may be provided with a cover 12 of rubber or a like material serving to prevent slip between the arms 6' and the boot sole 5.

When the boot is to be secured in the above described ski binding the arms 6 are released from the hooks 2' and swung upwardly to an approximately vertical position. With the arms in this position the boot may be placed unobstructed in correct position between the toe irons. The arms 6 are thereupon separately pressed downwardly past and under the hooks 2' and thereby the extensions or arms 6' are pressed springily against the edge portions of the sole with a pressure which is sufficient to hold the boot securely in position.

By forming each of the clamping pieces integral with the arm for depression of the same in the manner described above the clamping pieces may be acted upon separately so that a firmly securing of the boot may be effected in an easy manner. The springy arms may be moved in relation to each other and thereby also in relation to the toe irons in such a manner that they may be passed under and released from the hooks 2', and since said hooks 2' are arranged on the toe irons proper the distance between the hooks and the pivot of the arms is so short that the necessary clamping pressure may be obtained by means of a wire having a diameter which is smaller than that necessary if the arms 6 were connected with each other to form a bail the front end of which is to be secured to the ski by separate clamping means.

What I claim as new and desire to secure by Letters Patent is:

1. In a ski binding the combination of toe irons secured to the upper side of the ski, spikes protruding from the horizontal part of said irons and adapted for introduction into holes in the lower side of the boot sole, a cap-like member having a cylindrical depression provided with a cut-away portion rotatably secured on the outer side of the respective toe iron, a bent spring wire having a medial loop arranged around said cylindrical depression of each cap-like member and having portions which are passed out through the cut-away portion thereof, one of said portions being passed to the inner side of the iron and thereafter forwardly in position above the edge portion of the sole, and the other portion extended along the outer side of the iron, said last mentioned portion having such a length that the free end thereof protrudes in front of the iron and terminates in a loop acting as a grip and means for releasably locking the last mentioned portions of the spring wire in depressed position.

2. A ski binding as claimed in claim 1 in which

the locking means consists of a hook at the front end of each of the toe irons.

3. A ski binding as claimed in claim 1 in which each cap-like member is rotatably secured to the toe irons by means of a rivet passing through the bottom of said depression.

OTTO SEVERIN RUUD.

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