Feb. 27, 1962 G. G. LANDRY 3,023,017

SKI FITTING

Filed Sept. 14, 1959

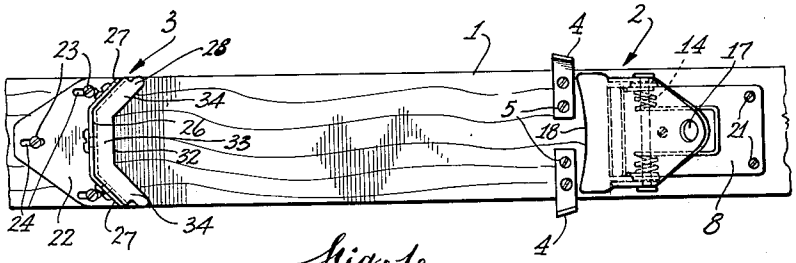


Fig. 1.

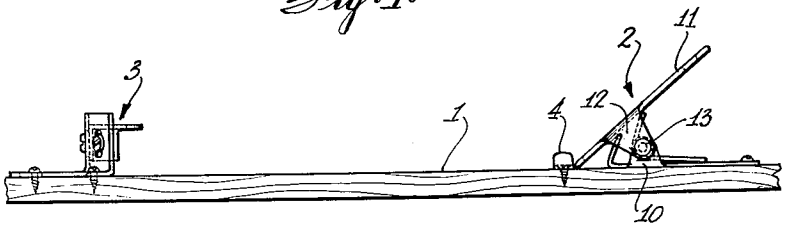


Fig. 2.

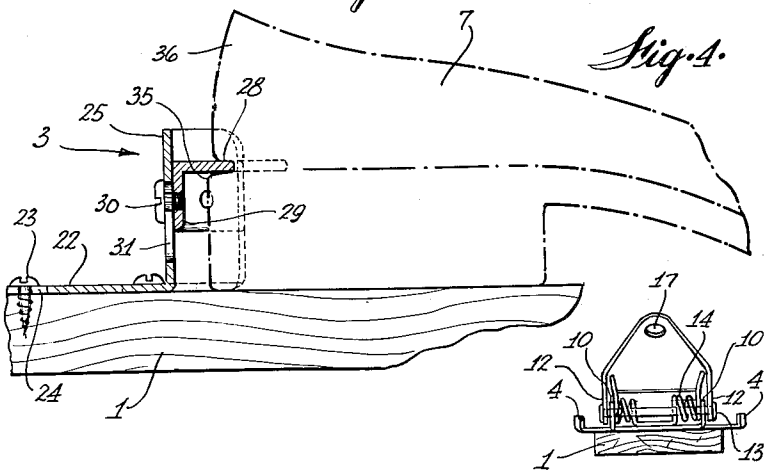


Fig. 4.

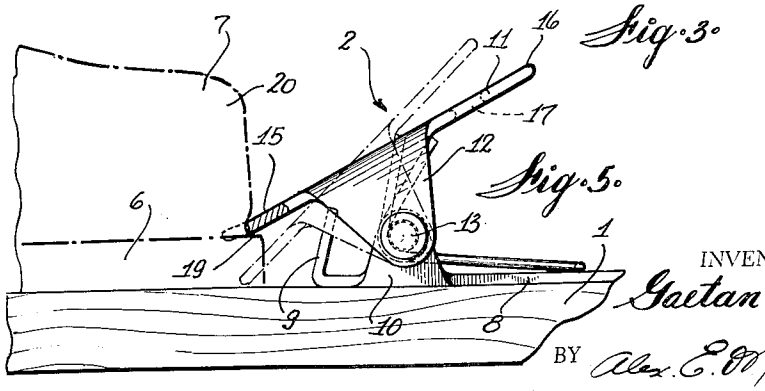


Fig. 3.

Fig. 5.

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United States Patent Office 3,023,017 Patented Feb. 27, 1962

3,023,017

SKI FITTING

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Filed Sept. 14, 1959, Ser. No. 839,727
2 Claims. (Cl. 280—11.35)

This invention relates to ski fittings.

Modern types of ski fittings are of relatively complicated and expensive construction. It is of course desirable that such a fitting be capable of convenient and rapid application to and removal from the boot of the wearer, and that it be effective to retain the ski on the boot under all normal skiing conditions but that it be releasable therefrom in response to abnormal conditions such as might occur should the skier become involved in an accidental fall or the like.

It is an object of this invention to provide a ski fitting which is of simple and inexpensive construction, which may be applied to a boot and removed therefrom in a more convenient and rapid manner, and which is fully effective and satisfactory in meeting all skiing conditions.

The invention will be described with reference to the accompanying drawing, in which:

FIGURE 1 is a plan view of a ski fitting in accordance with the invention,

FIGURE 2 is a side elevation,

FIGURE 3 is an end elevation of the toe portion of the fitting,

FIGURE 4 is an enlarged sectional elevation of the heel portion of the fitting, and

FIGURE 5 is an enlarged side elevation, partly in section, of the toe portion of the fitting.

In the drawing, 1 indicates a ski on which is mounted a fitting comprising toe clamp 2 and a heel clamp 3.

A pair of separate cleats 4 are secured as by screws 5 to the ski, such cleats being adapted to embrace the edges of the sole 6 of a ski boot 7 in conventional manner.

The toe clamp 2 comprises a base plate 8 having an inclined end flange 9 and a pair of upright ears 10 located at the edges of the plate 8. Hingedly mounted on the base plate is a plate 11 as by means of depending ears 12 thereon and a hinge pin 13 extending through the two pairs of ears 10 and 12. A spring 14 imposes a strong downward pressure on the rearward portion 15 of plate 11. The forward portion 16 of plate 11 constitutes a lever which may be manually actuated to swing the rearward portion 15 upwardly against the action of spring 14. A hole 17 may be provided in portion 16 for reception, for instance, of the end spike of a ski pole to facilitate depression of the portion 16. The rearward edge 18 of portion 15 may be curved as shown, such edge being adapted to be placed on top of the sole welt 19 of the ski boot (as shown in FIGURE 5) and to extend around the toe portion of the welt and to snugly engage the boot at the base of the usual depression at the juncture of the welt and the toe cap 20. It will be observed that in this clamping position of the plate 11, it extends angularly upwardly therefrom whereby the plate through the spring 14 exerts a strong downward pressure on the boot sole to clamp the toe portion of the boot securely to the ski.

It will be apparent that the toe clamp 2 of the fitting will be secured (as by screws 21) to the ski slightly forwardly of the cleats 4 for cooperation therewith.

The heel clamp 3 comprises a base plate 22 arranged to be adjustably secured to the ski as by means of screws 23 extending through slots 24 in the plate 22. The plate has an upright flange 25 at the forward end thereof, such flange having a central section 26 disposed in a direction normal to the longitudinal axis of the heel clamp 3 and the ski and side wings 27 extending angularly forwardly of the section 26. A heel cleat 28 disposed in generally parallel relation to the plate 22 and ski 1 is secured to the flange 25 as by a depending flange 29 on the cleat and screws 30 and is adjustable as to height above the plate 22 by means of slots 31 in flange 29 and through which the screws 30 extend. The flanged edge of the cleat and the forward edge 32 thereof have a configuration conforming to that of the flange 25. Thus, the edge 32 has a central section 33 normal to the axis of the heel clamp 3 and wing sections 34 extending angularly forwardly thereof.

The edge 32 of the cleat 28 is adapted to snugly engage the ski boot at the base of the normal depression at the juncture of the heel welt 35 and the heel 36 of the boot. It will be apparent that the central section 33 will engage the rear portion of the heel welt and the wings 34 will engage the side portions of the heel welt.

In use, with the clamps 2 and 3 of the fitting mounted on a ski in corresponding relation to the size of boot of the wearer, the forward portion 16 of plate 11 is elevated and the heel of the boot is applied to the heel clamp 3 in the manner described, such clamp 3 having been adjusted as required to the size of boot. The forward portion of the plate 11 is now lowered into clamping relation with the toe portion of the welt, as shown in FIGURE 5.

The fitting described is of simple and inexpensive construction. The wearer's boot may be applied thereto in a matter of seconds. Moreover, since the application procedure is so simple, a ski pole may be employed to manipulate the fitting without stooping. It positively secures the boot of the wearer to the ski under all normal conditions of use. However, in response to any abnormal separating force exerted between the ski and the wearer, such as might occur as the result of an accidental fall or the like, the fitting will slide over the boot welt and release the ski from the wearer, thus avoiding injury which might otherwise result.

I claim:

1. A ski fitting comprising a heel clamp having a base plate, an upright flange on said plate, a heel cleat having a flange engaging said base plate flange, and means securing said flanges together for adjustment in a direction perpendicularly of said base plate, said cleat having a forwardly extending heel welt engageable edge portion, said edge portion having a central section and a heel contour conforming wing section at each end of said central section extending angularly forwardly thereof, and a toe clamp having a base plate, a plane ski-engageable surface on said toe clamp base plate, a clamping plate hingedly mounted on said toe clamp base plate about an axis transversely thereof and having a rearward portion and a toe welt engageable edge on said rearward portion, and a spring urging said rearward portion towards said toe clamp base plate, said rearward portion being swingable to a first toe welt engageable position and to a second position approaching the plane of said ski engageable surface, said rearward portion in said first position being at a forward-

ly opening acute angle to said plane of said ski engageable surface, said toe welt engageable edge having a length at least substantially as great as the transverse extent of said toe clamp base plate.

2. A ski fitting as defined in claim 1, said forward portion having a ski pole receivable aperture therein.

References Cited in the file of this patent

UNITED STATES PATENTS

2,546,694	Johansen	Mar. 27, 1951
2,573,955	Cubberley	Nov. 6, 1951
2,610,861	Campbell	Sept. 16, 1952
2,745,672	Meier	May 15, 1956
2,831,696	Jones	Apr. 22, 1958

FOREIGN PATENTS

166,826	Switzerland	Apr. 2, 1934
266,665	Switzerland	May 1, 1950
327,523	Italy	July 13, 1935