United States Patent [19]

Penney

[11] **3,879,048**

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[54] **SKI POLE HANDLE**

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[52] **U.S. Cl.** ..... **280/11.37 H**

[51] **Int. Cl.** **A63c 11/22**

[58] **Field of Search** ..... 280/11.37 B, 11.37 H, 280/11.37 D; D34/14, 5 GS; 224/28 R, 28 A, 224/28 P, 28 G, 28 W, 5 J; 2/16, 17

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3,451,688	6/1969	McDonald	280/11.37 H
3,479,045	11/1969	Miller	280/11.37 H
3,738,674	6/1973	Pauls	280/11.37 B

Primary Examiner—David Schonberg
Assistant Examiner—David M. Mitchell
Attorney, Agent, or Firm—Criddle & Thorpe

[57] **ABSTRACT**

A ski pole handle composed on an elongate body or grip that is contoured to provide finger gripping and thumb rest portions thereon, on which body, projecting normally from the upper end thereof, is arranged a flange that is contoured along its undersurface to slope somewhat downwardly and inwardly from along its outer edge to overlap most of a skier's thumb, the thumb joint with his hand, and the joint of his hand and index finger as he grips the handle. A lip is formed around part of the lower end of the elongate handle body extending in a normal plane therefrom as a reaction surface to support and to partially contain the bottom of the skier's hand and a part of his lower wrist to which extension lip a support platform may be hinge connected to prevent unwanted lateral wrist bending. A wrist clamp that will open automatically when subjected to a sharp pulling force thereon is attached by a strap to the handle or is formed as part of the hinged platform.

10 Claims, 5 Drawing Figures

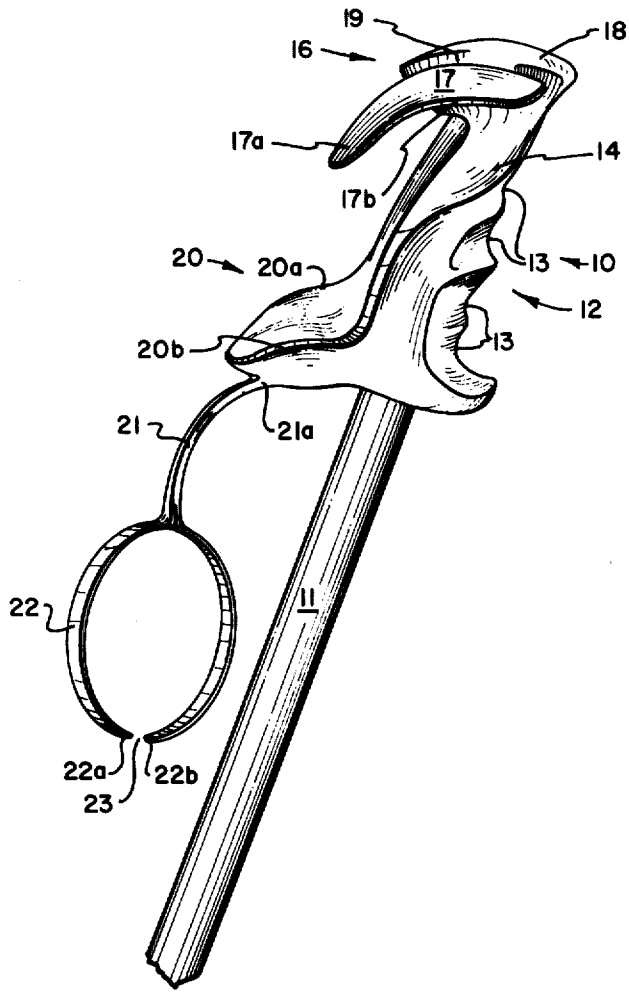


FIG 1

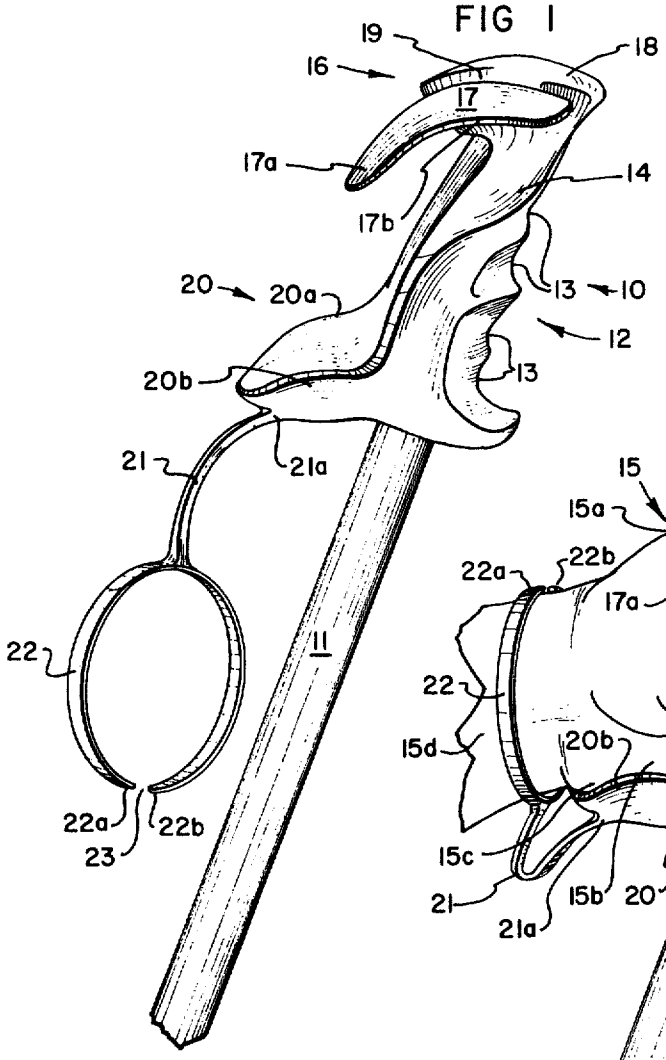


FIG 2

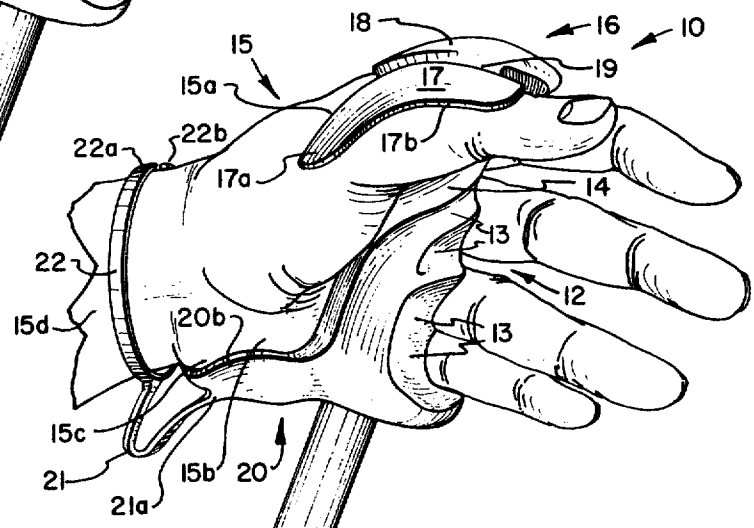
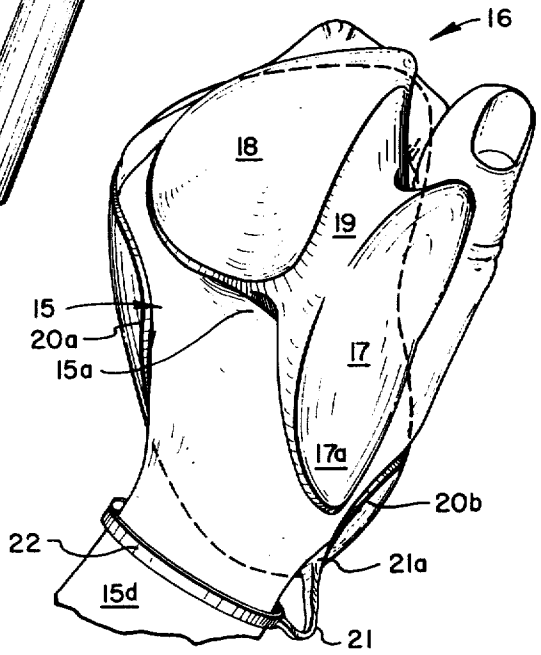


FIG 3



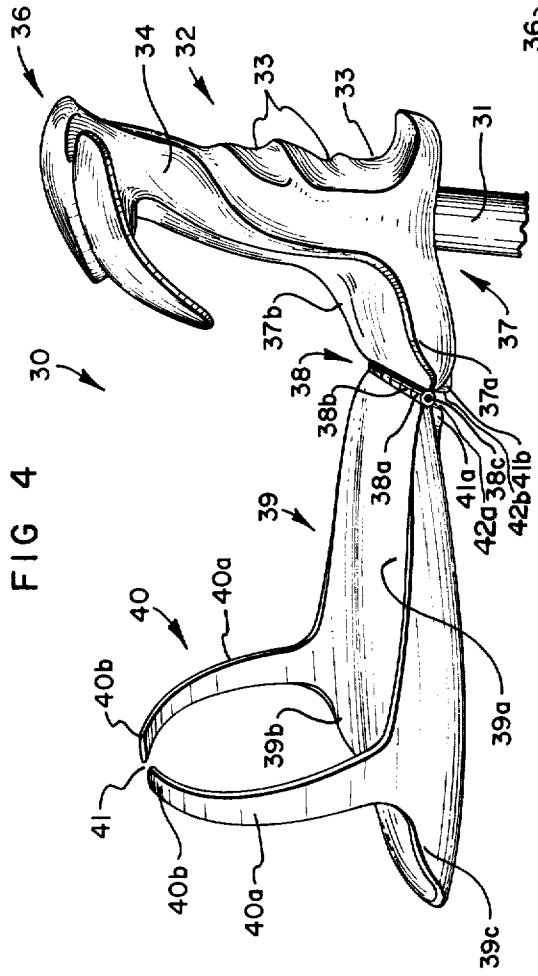

36
34
32
33
33
31
37
37b
38
38b
38a
37a
41a
38c
42a
42b
41b
30
39
40
40a
40b
39b
39a
41
40b
40a
39c

FIG 4

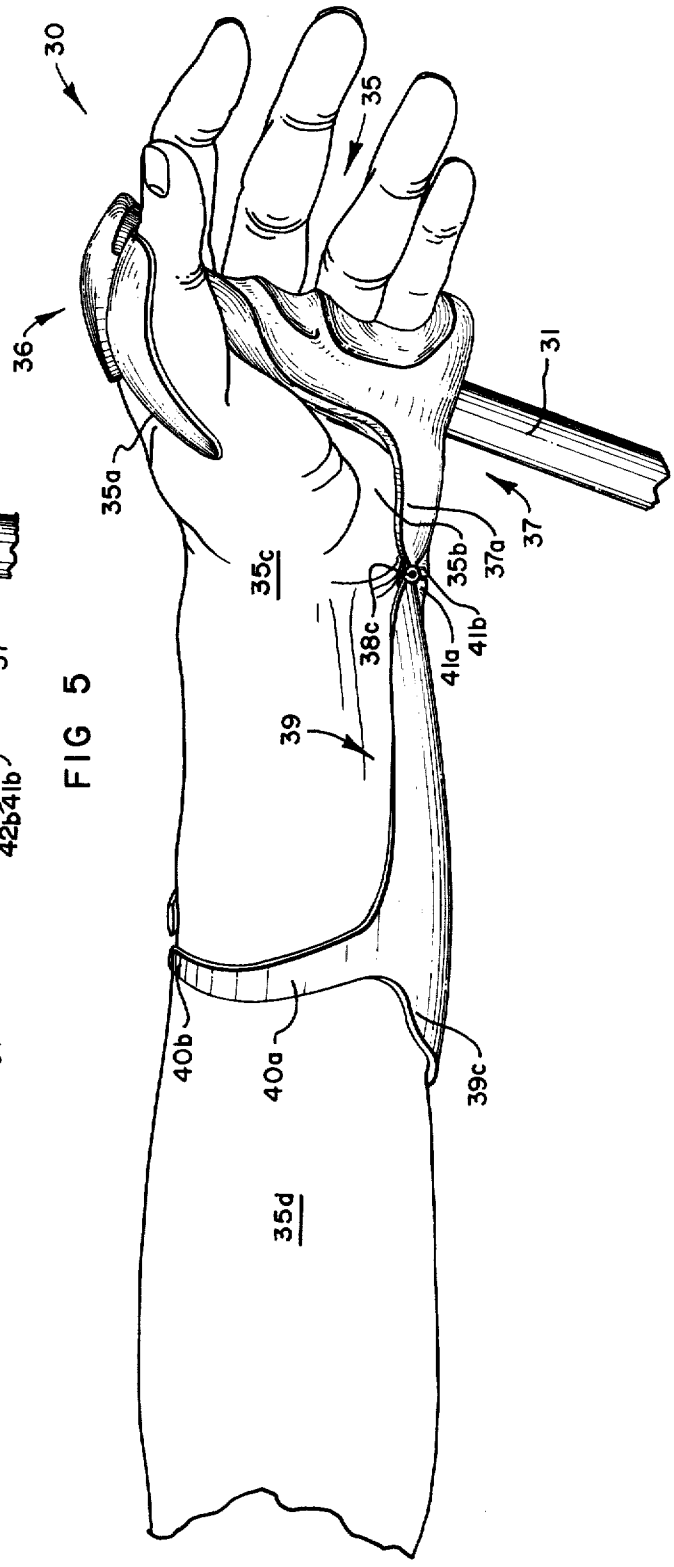

30
35
36
31
35a
37
37a
35b
35c
38c
41b
41a
39
40b
40a
39c
35d

FIG 5

SKI POLE HANDLE

BRIEF DESCRIPTION OF THE INVENTION

1. Field of the Invention

This invention relates to a molded handle or grip for a ski pole formed to accommodate a skier's hand and to be supported thereto.

2. Prior Art

The sport of skiing in recent times has enjoyed an increasing popularity with both young and old alike. With this increased popularity have come numerous improvements and refinements in ski equipment. Ski poles, in keeping with this trend, have undergone marked changes in configuration and in the materials used in their fabrication, with poles currently available that are strong and lightweight which are suited to the styles and aggressive forms of skiing practiced today. Such configurations have included molded handles or grips that are formed to conform to a skier's hand facilitating his maintaining his poles in a proper position and attitude. One such molded handle incorporating finger and thumb gripping areas formed thereon, is taught in an Austrian patent issued to Viktor Peternell, U.S. Pat. No. 248,310, and a similar molded contoured ski pole handle is taught in U.S. Pat. No. 3,436,090. The handle of U.S. Pat. No. 3,436,090, includes hand supporting projections that are similar to those of the present invention in that they extend outwardly from the handle top and bottom areas. While the hand supporting projections taught in the aforesaid patent are similar to the supporting lip and flange projections of the present invention, they are not arranged, as are the contoured projections of the present invention, to support a skiers hand should he temporarily release his grip therearound. Rather, the aforesaid patent discloses a handle that includes a flexible strap, attached to the handle bottom area, which strap interacts with the disclosed handle to properly maintain a skier's hand positioned on the handle body. While a wrist clamp, that is attached to the handle by a single strap or is formed as part of a hinged supporting platform is preferably provided with the present invention, it is arranged to be releasable and is included solely to maintain the ski pole to the skier's wrist should he take a light fall or to enable the skier to maintain the ski pole on his wrist when he is not gripping the handle.

A strapless ski pole handle utilizing upper and lower projections that extend outwardly from the top and bottom ends of a body of a ski pole handle is shown in U.S. Pat. No. 3,479,045. While the purpose of these projections, like the lip and flange projections of the present invention, is to support and position a skier's hand, their form and arrangement are unlike those of the present invention. The topmost projection of the grip of the present invention is formed of an essentially rigid material and is shaped uniquely from the topmost projection of the grip of the aforesaid patent. Additionally, the extension lip of the present invention can have included therewith a hinged platform contoured and arranged to fit closely to a skier's wrist and lower arm to prevent unwanted lateral wrist rotation. These differences in material, grip shape, and arrangement, are determinative of the relative operation and use of the handles of the aforesaid patent contrasted with that of the present invention. Further, the top projection of the aforesaid U.S. Pat. No. 3,479,045, is formed of a resilient material, and is intended to bend away from the top of the skier' s hand, allowing the hand to pass thereover, should the pole be subjected to a rotational force, such as might occur in a fall where the pole binds in the snow or against some rigid object. Whereas, the handle of the present invention is formed to closely fit into the contours of the top and bottom of the skier's hand and to release by channeling hand rotation out of contact therewith upon being subjected to a rotational force, with the contoured rigid top projection of the present invention serving to channel and direct this rotation rather than displacing away from such a rotational force. The present invention therefore unlike the aforesaid patents effects handle release by its contoured construction rather than by a displacement of any portion thereof.

SUMMARY OF THE INVENTION

It is a principal object of the present invention to provide a ski pole handle formed to fit within a skier's hand having contours and end projections arranged thereon to properly position and maintain the ski pole within the hand and to temporarily support the handle in the hand should be partially release his grasp therearound.

Another object is to provide a ski pole handle having a reaction surface thereon that contacts partially cradling a skier's hand and a portion of his wrist for controlling the attitude and positioning of the ski pole to obtain an efficient energy transfer with each pole thrust.

Another object is to provide a ski pole handle having a reaction surface to which is hinge connected a separate platform as an extension thereof which platform serves to limit unwanted side to side or lateral wrist rotation while allowing necessary vertical wrist displacement from the plane of the skier's arm.

Another object is to provide a ski pole handle that is formed to quickly and safely release from a skier's hand in the event a rotational force is applied to the ski pole.

Still another object is to provide a ski pole handle formed from an essentially rigid material as a single piece, or as a single piece having a hinged platform connected thereto, by molding methods.

Still another object is to provide a ski pole handle and platform extension thereof constructed from inexpensive materials, which handle is readily interchangeable with conventional type grips for ski poles.

Principal features of the present invention include a ski pole handle composed of an elongate body or grip portion having enlarged flange and lip extensions projecting outwardly from the respective top and bottom ends thereof that are formed to overlap and support the top and heel surfaces of a skier's hand closed around the elongate body.

Formed on the elongate body are contoured surfaces for accommodating a skier's palm and individual fingers therearound, and providing a rest for his thumb. The extension flange is arranged to extend outwardly from the top end of the elongate body to overlap the top of a skier's thumb, binding it against the body's contoured thumb rest, when the thumb is flexed even slightly. A part of the extension flange is also arranged to overlap the joint between the skier's hand and index finger, the joint of his thumb and hand, and to extend well into the soft hollow at the junction between the skier's thumb and hand. The arrangement of the handle finger depressions and thumb rest and the contoured and overlapping configuration of the extension flange

provide a ready reference for properly positioning the handle in a skier's hand closed therearound.

The extension flange is also intended to support the handle on top of the skier's hand, tending to prevent the displacement of the handle therefrom, should he temporarily release his fingers from engagement with the elongate body.

The handle enlarged extension lip which projects outwardly from the bottom end of the elongate body, is contoured to provide a reaction surface on which the heel or bottom of the skier's hand and a part of his wrist rests and against which he pushes downward on the pole. The extension lip is curled upwards along the opposite sides thereof to form a saddle or depression for partially containing the skier's hand therein. Additionally, a platform may be provided that is hinge connected to the rearmost edge of the extension lip as a means for further limiting unwanted wrist rotation. The extension lip provides a means for limiting wrist rotation, insuring a rigid straight wrist movement of the attached ski pole as the pole is moved into contact with a snow covered surface, and for partially containing the heel portion of a skier's hand resting thereon, which wrist rotation and containment are further limited by the inclusion of a hinged platform therewith.

A releasable clamp that is attached to the handle by a single tether strap or is formed as an integral part of the rearmost end of the hinged platform maintains the individual pole to the skier's wrist during a fall or when the pole is not held. The releasable clamp is preferably formed of a resilient material such that the ends thereof are naturally biased towards one another. Additionally, a strap or leaf spring of flexible resilient metal can be arranged as a core for the wrist clamp, around which core the clamp is formed to provide a constant biasing of the ends thereof. The resilient biasing of the clamp is intended to be sufficient to normally maintain the clamp ends around the wrist but to be overcome, allowing the clamp ends to spread apart, releasing the wrist from therebetween, when the pole is subjected to a displacing force of sufficient magnitude that the skier's arm and wrist could be damaged.

Additional objects and features of the invention will become apparent from the following detailed description, taken together with the accompanying drawings.

THE DRAWINGS

FIG. **1** is a side elevation view showing the right side and back portions of a left hand ski pole handle of the present invention connected to a section of a ski pole;

FIG. **2**, a side elevation view like that of FIG. **1** with a skier's left hand shown curling around the ski pole;

FIG. **3**, a top plan view of the ski pole handle of FIG. **2** showing the handle being gripped by the skier's hand;

FIG. **4**, a side elevation view like that of FIG. **1** showing a support platform hinge connected to the ski pole handle; and

FIG. **5**, a side elevation view like that of FIG. **4** with a skier's left hand and lower arm shown therewith.

DETAILED DESCRIPTION

Referring now to the drawings:

A preferred embodiment of the present invention in a ski pole handle **10** is shown in FIGS. **1–3**. The ski pole handle **10**, hereinafter referred to as handle, is preferably formed as a single piece from an essentially rigid material and is axially mounted, by means not shown, to the top end of a usual ski pole shaft **11**. The handle **10** is composed of an elongated upright body portion **12** having contoured finger grooves **13** and a thumb rest **14** molded therein, and is formed to specifically fit either a right or left skier's hand **15**. FIGS. **2** and **3** show the handle **10** of the present invention formed to accommodate a skier's left hand.

Integrally formed with, and extending normally from around the upper end of the body portion **12**, is an extension flange **16**. Extension flange **16** is contoured on one side **17** to fit snuggly against and to overlap most of the skier's thumb, including both the thumb joint and knuckle, and has an end **17***a* that extends well over the thumb joint covering a portion of the hand **15** at the base of the thumb and at a side of the thumb opposite to the body portion **12** positioned between the thumb and index finger. The other side **18**, FIG. **3**, of the extension flange **16**, is formed to overlap portions of the skier's index finger and the index finger joint with the skier's hand **15**. A concave ridge **19** is shown. FIG. **3**, formed between the extension flange sides **17** and **18**, that has its undersurface contoured to fit into, overlapping the soft hollow **15***a* of the skier's hand **15**. The extension flange side **17**, its end **17***a*, and the extension flange side **18** are arranged to overlap the mentioned portions of a skier's hand **15** to provide supports thereto that will remain in contact with the top of the skier's hand in the event he should temporarily relax his fingers from around the body portion **12**, as shown in FIG. **2**. Further, the undersurface **17***b* of extension flange side **17** opposite to the top of the thumb rest **14** is formed as a shoulder that will bind the skier's thumb between it and the thumb rest **14**, when the skier's thumb positioned therebetween is even slightly flexed or bent. The arrangement of extension flange **16** as a support for maintaining the handle **10** to a skier's hand **15**, and the interaction of extension flange side undersurface **17***b* and thumb rest **14** provide a support arrangement for sustaining handle **10** properly positioned on the top of the skier's hand **15** even though he temporarily straightens his fingers out of their individual finger grooves **13**. Should however, a rotational force be applied to the handle **10**, as for example if the ski pole **11** were to be caught in an obstruction or the like, the extension flange sides **17** and **18** and thumb rest **14** are contoured such that the handle **10** is free to rotate away from the skier's thumb releasing his hand **15** and avoiding injury thereto.

Integrally formed with and extending normally from around the lower end of the body portion **12**, is a contoured extension lip **20**. Extension lip **20** is an essentially horizontal projection extending in a plane that is normal to the plane of the finger grooves **13** and thumb rest **14**, having its opposite edges **20***a* and **20***b* somewhat upturned forming a saddle for maintaining the heel of the skier's hand **15** therein. Extension lip **20** provides a rest or reaction surface against which the heel **15***b* and a portion of the wrist **15***c* of the skier's hand **15** is positioned when he grasps handle **10**, FIG. **2**, with the upturned edges **20***a* and **20***b* limiting or curtailing rotation of the hand **15** around the handle **10**. While the extension lip edges **20***a* and **20***b* are arranged to extend a sufficient distance out from the plane of the extension lip **20**, so as to limit or curtail unwanted rotation of hand **15** around the handle **10**, they do not prohibit such hand rotation should a rotational force be applied to the pole. Rather, the lip edges **20***a* and **20***b*,

when subjected to such a rotational force, ride into the surface of the heel **15***b* of hand **15** tending to elevate or cam the hand thereover, somewhat compressing the hand against the undersurface of the extension flange **16**, and urging the hand **15** out of contact with the handle body portion **12**. Of course, the extension lip edges **20***a* and **20***b* could be formed to give or bend away from the hand to insure that the handle **10** will rotate out of contact with the hand **15** should the need arise. Extension lip **20** provides a stop, in addition to a rest and saddle for supporting the heel **15***b* of hand **15**, which stop restricts wrist rotation past a plane between the hand **15** and the skier's arm **15***d*. By so limiting wrist rotation, as the skier holding handle **10** pushes the pole into a snow covered surface, a bar is established between the wrist **15***c* and arm **15***d*. Such a bar provides a stop limiting ski pole rotation past an optimum vertical attitude, assuring an efficient energy transfer from the skier's arm **15***d* to the ski pole **11**.

As has already been explained herein the skier's hand **15** is closely maintained between the extension flange **16**, is supported on extension lip **20** and rests between the extension lip edges **20***a* and **20***b* when his fingers and thumb are even loosely gripping the body portion **12**. The coupling of the hand **15** to the handle **10** formed by the flange and extension lip described is intended to be tight but not so tight that circulation within the hand **15** would be curtailed, possibly resulting in the hand becoming cold. The coupling formed thereby is intended to support and maintain the handle **10** properly positioned within the skier's hand **15** even though he should release his grip on the handle body portion **12**. The handle **10** of the present invention is therefore intended to maintain itself properly positioned within a skier's hand **15** and requires no additional means, such as straps or the like, for the ski pole connected thereto to be maintained in a proper attitude. While a strap or a like means is not required, it is desirable that handle **10** have some arrangement included therewith for at least temporarily securing the pole to the skier's wrist. Such a tethering of the individual pole to the wrist allows the poles to hang or drag when not in use, such as when the skier is being pulled along by a rope tow, T-bar lift, or the like. Means for attaching the handle **10** to the skier's wrist **15***c* are also desirable to insure that the ski pole will remain with the skier even though he falls. Such an attachment means should however, be made to be releasable when subjected to a force of sufficient magnitude that the skier's arm or wrist might be injured if the ski pole remained connected thereto. Such a force could conceivably be applied if the ski pole became caught in the snow or even entangled in a lift mechanism.

Such a releasable attachment means fulfilling the requirements described above, for connecting the handle **10** with a skier's wrist is therefore preferably included as part of the present invention. FIGS. **1–3**, show a preferred embodiment of such a connection means which includes a strap **21** that is secured on one end at **21***a* to the undersurface of the extension lip **20** and is connected at its other end to a mid portion of a clamp **22**. Clamp **22** is preferably formed from a resilient plastic as loop which is broken at a single point **23**. The clamp ends **22***a* and **22***b* formed at the broken point **23** are naturally resiliently biased towards one another, and additional biasing of the clamp ends could of course be provided by the incorporation of a strap or leaf spring of resilient metal broken also at **23**, not shown, as the core of the clamp **22**. The resilient characteristics of the formed clamp **22** are intended to allow the clamp ends **22***a* and **22***b* to be spread apart so that the skier's wrist can pass therebetween, FIGS. **2** and **3**, after which passage the clamp ends should spring back to their original attitude, clamping against the sides of the wrist **15** *c*.

While the strap end **21***a* is shown herein connected to the undersurface of the extension lip **20**, it should of course be obvious that the strap end **21***a* could just as well be connected to any part of the handle **10** as desired which point of connection should therefore not be construed as being limited to any one point on the handle **10**.

In practice, a skier spreads the clamp ends **22***a* and **22***b* apart to install the clamp **22** around his wrist. Clamp **22** releasably secures the handle **10** to the skier's wrist by a single strap **21** that is not involved in positioning or maintaining the skier's hand on the handle **10**. The skier grasps the handle **10** of the present invention by fitting his hand between the extension lip and flange **20** and **16** respectively, so that his fingers and thumb are curled around the body portion **12** with the heel **15***b* of his hand **15** supported between the upturned extension lip edges **20***a* and **20***b* and the end **17***a* of the extension flange side **17** overlapping the thumb joint and a portion of the hand **15**.

Each of the skier's fingers are intended to rest in an appropriate contoured finger groove **13** with his thumb supported on the thumb rest **14**. So arranged, the skier's thumb lies between the undersurface **17***b* of the side **17** of the extension flange **16** and the opposite top surface of the thumb rest **14** with the end **17***a* thereof overlapping the thumb joint and a portion of his hand **15**. The surfaces opposing thumb rest **14** and extension flange undersurface **17***b* are formed such that even a slight binding of the thumb joints will tend to bind the thumb therebetween. With the skier's hand **15** installed around the body portion **12**, heel **15***b* of the hand and a portion of his wrist **15***c* are supported on the extension lip **20**, and between the upturned edges **20***a* and **20***b* thereof, with extension lip **20** providing a rigid rest that curtails wrist **15***c* rotation around the plane of the skier's arm, establishing a bar transfer of energy therebetween. Energy transfer from the arm to the pole **11** is thereby maximized as the pole **11** is maintained in the proper attitude with respect to the skier's arm.

The contoured body portion **12** and the extension lip and flange **20** and **16** respectively are intended to closely maintain and properly position the handle **10** within the skier's hand **15**, as has been explained. The handle arrangement additionally serves to support the hand thereto should the skier's grasp therearound be released, but will allow hand rotation away from the handle should a rotational force be applied to the pole **11**. The arrangement of handle **10** therefor insures that the skier's arm or hand will not be injured should the ski pole bind against some object or become entangled, as in a ski lift or the like.

While a handle formed as a single piece from a semi-rigid material, such as a plastic, is a preferred form of construction, it should be understood that other manufacturing methods could be utilized and the handle could be formed in sections that are joined together. Also, while a clamp attached by a strap to the handle is shown herein as the preferred means for attaching

the handle **10** to a skier's wrist, other attachment means, such as a continuous strap encircling the skier's wrist or the like could also be used as a handle to wrist attachment means without departing from the subject matter coming with the scope of this invention.

A second embodiment of the present invention of a ski pole handle is shown in FIGS. **4** and **5**. Shown therein, the ski pole handle **30**, hereinafter referred to as handle, like the handle **10** is connected to the top of a usual ski pole shaft **31** and consists of an elongate upright body portion **32**, having contoured finger grooves **33** and thumb rest portions **34**, especially formed to fit a skier's hand **35**, FIG. **5**. Integrally formed with and extending normally from around the upper and lower ends of the body portion **32** are an extension flange **36** and an extension lip **37**. Extension flange **36** is formed like the extension flange **16** of the first embodiment having contoured sides which overlap portions of the top of the skier's hand **35**, extending well over the thumb joint on one side, and over the index finger and the index finger joint with the hand **35** on the other side. Extension flange **36** also like the extension flange **16** of the first embodiment has a concave ridge formed between the sides thereof which fits into and overlaps the soft hollow **35***a* of the skier's hand **35**.

The extension lip **37** of this embodiment is essentially like the extension lip **20** of the first embodiment in that it is formed having an essentially flat reaction surface for supporting the heel **35***b* of the skier's hand **35** with the edges of opposite sides **37***a* and **37***b* thereof upturned forming a saddle on which the heel **35***b* rests to curtail unwanted lateral hand movement. Extension lip **37** however, is distinctive from the extension lip **20** of the first embodiment in that a leaf **38***a* of a double leaf hinge **38** is formed along the rearmost edge **36***c* thereof that is closest to the skier's body when the handle **30** is held by hand **35**, as shown in FIG. **5**. The hinge leaf **38***a* is arranged to receive and connect with a mating hinge leaf **38***b* arranged on the end of an arm and wrist support platform **39** forming a double leaf hinge **38** when a pin **38***c* is inserted therethrough, FIGS. **4** and **5**.

The arm and wrist support platform, hereinafter referred to as platform, like the extension lips **20** and **37**, is a reaction surface that will support and contain a part of the skier's lower arm and wrist. The platform **39** is intended to be connected by double leaf hinge **38** to extension lip **37** and by a clamp **40** to the skier's forearm **35***d*, FIG. **5**, such that some vertical movement of the hand **35** around the horizontal plane of the wrist **35***c* and forearm **35***d* is allowed, but angular motion of the hand across the horizontal plane is prohibited. Platform **39**, shown in FIGS. **4** and **5**, consists of a contoured lower arm and wrist engaging portion **39***a*, from which portion edges **39***b* and **39***c* are curved upwardly therefrom to partially envelop the skier's lower forearm **35***d* and wrist **35***c*. Clamp **40** maintains the end of the platform **39**, opposite to double leaf hinge **38**, to the skier's forearm **35***d*, and is shown formed as an integral part of the platform **39**. The clamp **40** consists of opposing curved clamp sides **40***a* that project upwardly from rearmost portions of edges **39***b* and **39***c* of platform **39**, opposite to double leaf hinge **38**, to encircle a skier's forearm **35***d* positioned therebetween. Clamp **40**, like the clamp **22** of the first embodiment, is formed from a naturally resilient material such that the ends **40***b* are biased towards one another. Of course, like the clamp **22** of the first embodiment, a resilient metal strap or leaf spring arrangement may be arranged as the clamp **40** core, with resilient materials being formed therearound to provide a spring biasing of the clamp ends **40***b* towards each other.

Clamp **40**, like the clamp **22** of the first embodiment, is intended to connect the platform **39** to the skier during normal skiing operations, but to readily release from his arm **35***d* should the ski pole handle **30** be subjected to a rotational force which might injure the skier unless the clamp **40** were to release therefrom. The ends **40***b* of clamp **40** should therefore be urged towards one another, but such urging should not be so strong that the clamp ends **40***b* will not spread apart when the forearm **35***c* is forced outwardly therebetween as when a rotational force is applied to the handle **30**. Clamp **40** could, of course, be formed separately from platform **39** with the web portion thereof between the clamp sides **40***a* arranged to contact the undersurface of the platform **39**, extending therearound such that the clamp sides **40***a* practically encircle the forearm **35***c*. Also, the clamp **40** could conceivably be formed separately and tethered, by an appropriate line, to a point on the platform **39**.

As has been disclosed herein, the platform **39** is preferably connected to the handle extension lip **37** by the double leaf hinge arrangement **38**. While the double leaf hinge **38** shown is preferred, it could of course be replaced with an integral plastic or like "living hinge" formed of a polypropylene like plastic arranged to join respective edges of the extension flange **37** and platform **39**. Or, any other such hinge arrangement could be employed.

Arranged to project from the undersurface of the platform **39** and extension lip **37**, opposite to the respective hinge leafs **38***a* and **38***b*, are stops **41***a* and **41***b*. Stops **41***a* and **41***b* each have opposing flat faces **42***a* and **42***b* formed thereon which will butt against one another when the extension lip **37** is rotated to a desired angular point that is only slightly past the plane of the platform **39**. Contact of the respective faces **42***a* and **42***b* of stops **41***a* and **41***b* therefore limit the skier's wrist rotation past an optimum point of angular displacement of the hand **35** with respect to the forearm **35***d*. A maximum transfer of energy is thereby insured between the forearm **35***d* and the held ski pole. The optimum angle of pole **31** to forearm **35***d* is shown best in FIG. **5**, wherein the platform **39** and extension lip **37** are so arranged that the stop faces **42***a* and **42***b* butt against each other.

The ski pole handle embodiment **30**, shown in FIGS. **4** and **5** essentially involves the attachment of platform **39** to the handle **10** of the first embodiment. This combination provides a ski pole handle **30** which, by its construction, is self-supporting to the skier's hand, provides a rigid locking to the skier's hand and arm preventing lateral wrist movements, while allowing the wrist to bend to a desired angular attitude. At which desired angular attitude the wrist is prevented from further bending by butting contact of faces **42***a* and **42***b* of opposing stops **41***a* and **41***b* arranged on the platform **39** and extension lip **37**, providing a bar lock between the arm and hand. With platform **39** closely held by clamp **40** to the skier's forearm **35***d*, should a rotational force be applied thereagainst, then the clamp sides **40***a* will spread apart allowing the forearm **35***d* to pass therebetween. Handle **30**, like handle **10**, is there-

fore constructed to automatically release from contact with the skier's extremity should a sufficient rotational force be applied to the pole **31.**

Although preferred forms of my invention have been herein disclosed, it is to be understood that the present disclosure is made by way of example and that variations are possible without departing from the scope of the following claims, which subject matter I regard as my invention.

I claim:

1. A ski pole handle comprising

an elongate body formed to accommodate a skier's hand therearound, arranged to be secured axially to a ski pole;

an extension flange projecting normally from the upper end of said body to overlie a portion of the skier's hand;

an extension lip projecting from the lower end of said body so as to underlie a portion of the skier's hand; and

a clamping means secured to one end of a strap, which strap is connected on its other end to said ski pole handle, wherein the clamping means is formed from a continuous loop, that is broken at a single point, of a resilient material such that the ends thereof are biased towards one another.

2. A ski pole handle comprising an elongate body formed to accommodate a skier's hand therearound, arranged to be secured axially to a ski pole;

an extension flange projecting normally from the upper end of said body to overlie a portion of the skier's hand;

an extension lip projecting from the lower end of said body portion so as to underlie a portion of the skier's hand; and

a clamping means secured to one end of the strap, which strap is connected on its other end to said ski pole handle, wherein

the strap secured on its one end to the clamping means is secured on its other end to the undersurface of the extension lip; and

a strap of resilient metal is arranged as the core of said clamping means.

3. A ski pole handle comprising

an elongate body formed to accommodate a skier's hand therearound, arranged to be secured axially to a ski pole;

an extension flange projecting normally from the upper end of said body that overlies both the skier's thumb joint and knuckle, a portion of his hand, a portion of his index finger, and the index finger joint with said hand;

a thumb rest formed as an outward projection from said body whose upper surface is arranged opposite to the undersurface of a portion of said extension flange spaced therefrom an amount to accommodate a skier's thumb closely therebetween;

an extension lip projecting from the lower end of said body portion so as to underlie the heel of the skier's hand and a portion of his wrist;

a clamping means secured to one end of a strap, which strap is connected on its other end to said ski pole handle; and

said clamping means being formed from a continuous loop, that is broken at a single point, of a resilient material such that the ends thereof are biased towards one another.

4. A ski pole handle comprising

an elongate body formed to accommodate a skier's hand therearound, arranged to be secured axially to a ski pole;

an extension flange projecting normally from the upper end of said body that overlies both the skier's thumb joint and knuckle, a portion of his hand, a portion of his index finger, and the index finger joint with said hand;

a thumb rest formed as an outward projection from said body whose upper surface is arranged opposite to the undersurface of a portion of said extension flange spaced therefrom an amount to accommodate a skier's thumb closely therebetween;

an extension lip projecting from the lower end of said body portion so as to underlie the heel of the skier's hand and a portion of his wrist;

a clamping means secured to one end of a strap, which strap is connected on its other end to said ski pole handle; and wherein the strap secured on its one end to the clamping means is secured on its other end to the under surface of the extension lip; and

a strap of resilient material is arranged as the core of said clamping means.

5. A ski pole handle comprising

an elongate body formed to accommodate a skier's hand therearound, arranged to be secured axially to a ski pole;

a reaction platform contoured to accommodate part of the skier's arm and wrist thereon;

means for rotatably connecting one end of said reaction platform to the lower end of said body; and

means for releasably connecting the opposite end of said reaction platform to the skier's arm.

6. A ski pole handle as recited in claim **5,** wherein the reaction platform has the edges of its opposite sides upturned to extend outwardly from said reaction platform forming a saddle therewith to support part of the skier's wrist and arm.

7. A ski pole handle as recited in claim **5,** wherein the means for rotatably connecting one end of said reaction platform to the lower end of said body consists of

a double leaf hinge, one leaf of which is formed along the one end of said reaction platform, with the other leaf thereof formed to connect to the lower end of said body; and

pin means for insertion through said hinge leaves.

8. A ski pole handle as recited in claim **5,** wherein the means for rotatably connecting one end of said reaction platform to the lower end of said body consists of an integral plastic hinge arranged therebetween.

9. A ski pole handle as recited in claim **5,** wherein the means for releasably connecting the end of said reaction platform to the skier's arm consists of

a clamping means arranged to project upwardly from the sides of said reaction platform for releasably coupling said reaction platform to the skier's arm.

10. A ski pole handle as recited in claim **9,** wherein the clamp means consist of

opposite clamp sides which project outwardly from the arm contacting sides of said reaction platform, which clamp sides are curved such that the unconnected ends thereof are close to each other; and

means for biasing the unconnected clamp ends towards each other.

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