United States Patent [19]

Shipstad et al.

[11] **3,874,686**

[45] **Apr. 1, 1975**

[54] **SKI POLE HAND SHIELD AND METHOD OF MANUFACTURE**

[75] Inventors: **Donald R. Shipstad,** North Hollywood; **Don Borden,** Sherman Oaks, both of Calif.

[73] Assignee: **Hot Grips, Ltd.,** Sherman Oaks, Calif.

[22] Filed: **May 25, 1973**

[21] Appl. No.: **364,054**

[52] **U.S. Cl.** ..... **280/11.37 H,** 2/16

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

[58] **Field of Search** ..... 280/11.37 D, 11.37 H, 280/11.37 L; 2/16, 17, 20, 161 A, 168; 224/52, 55

[56] **References Cited**

UNITED STATES PATENTS

557,362	3/1896	Clapp	2/17
2,997,042	8/1961	Mitchell	280/11.37 H
3,746,356	7/1973	Shipstad	2/16

FOREIGN PATENTS OR APPLICATIONS

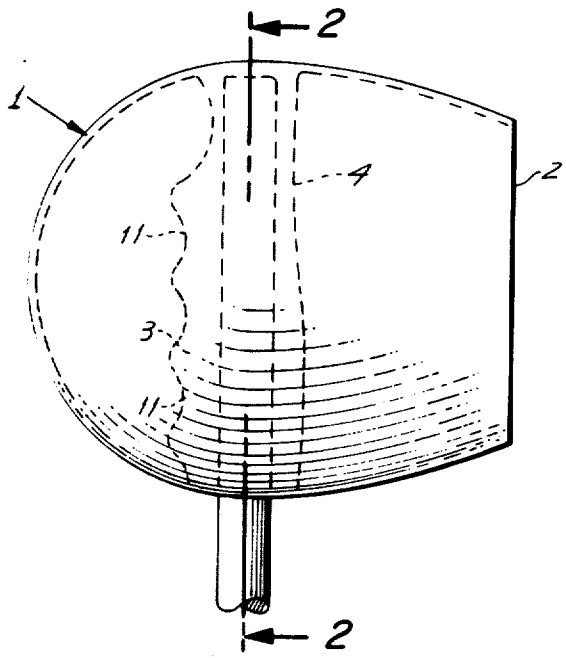
1,956,533	5/1971	Germany	2/17

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

[57] **ABSTRACT**

A ski pole hand shield molded in one part, and including a hand enclosure; having initially, oppositely directed external hand grip portions. The hand enclosure formed of material capable of being turned inside-out to dispose the hand grip portions within the enclosure and in alignment, the grip portions being tubular to receive a ski pole.

3 Claims, 3 Drawing Figures



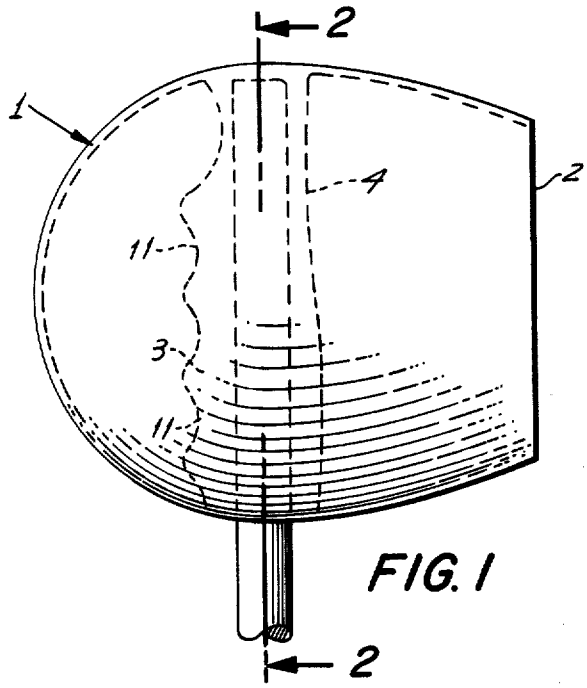


FIG. 1

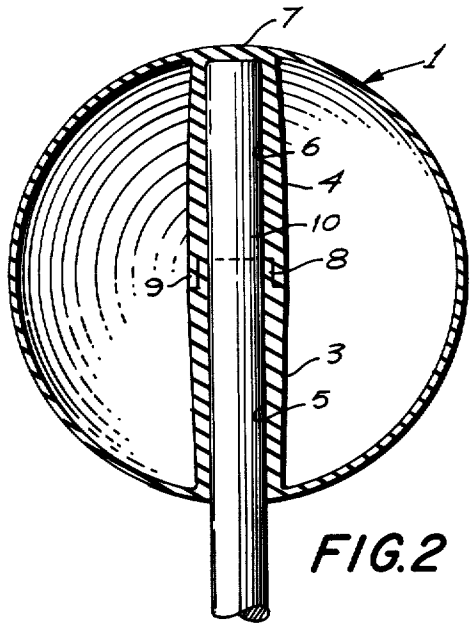


FIG. 2

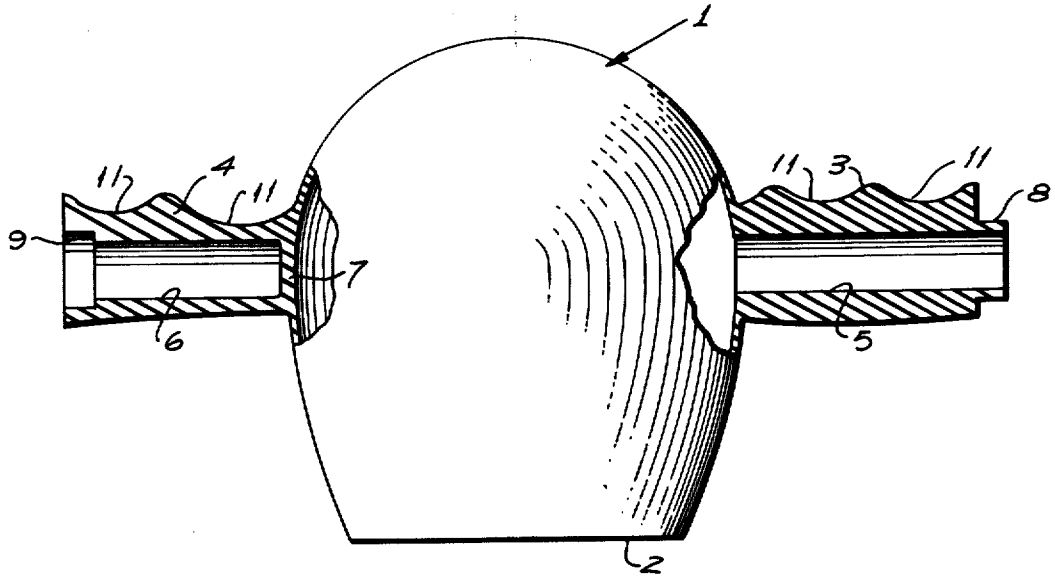


FIG. 3

SKI POLE HAND SHIELD AND METHOD OF MANUFACTURE

BACKGROUND AND SUMMARY OF THE INVENTION

The present invention is directed to a ski pole hand shield and method of manufacture which is a further development of the Hand Shield for Ski Poles which is the subject of a copending application, Ser. No. 126,076, filed Mar. 19, 1971, now U.S. Pat. No. 3,746,356, and is summarized in the following objects:

First, to provide a ski pole hand shield having an enclosure dimensioned to receive a skier's hand and including a pair of internal complementary grip portions each joined integrally with the enclosure and disposed in coaxial relation to receive a ski pole.

Second, to provide a ski pole hand shield and method of manufacture which is formed from a single molded part. The hand enclosure being initially formed with ski pole receiving hand grip portions that are externally disposed. The hand enclosure formed of material capable of being turned inside-out to place the hand grip portions internally and in position to receive a ski pole.

DESCRIPTION OF THE FIGURES

FIG. **1** is a side view of the ski pole hand shield.

FIG. **2** is a transverse sectional view thereof taken through **2—2** of FIG. **1.**

FIG. **3** is a partial elevational, partial sectional view showing the hand shield as initially molded wherein a pair of hand grip portions are externally exposed.

The ski pole hand shield includes a bulbous hand enclosure **1** having an inlet opening **2.** The hand enclosure is dimensioned to receive the skier's hand and to accomodate the hand in a clenched position with the margins of the opening fitting about the wrist of the skier.

The hand enclosure is formed of rubber or other elastomeric or semi-elastomeric material and may be a foamed material to enhance its insulation properties. However, the hand enclosure may be sufficiently large as to receive the skier's hand when his hand is fitted with a glove.

Internally, the hand enclosure is provided with a pair of complementary grip elements **3** and **4,** the distal ends of which are joined integrally with the hand enclosure. The grip element **3** is provided with an open end bore **5** whereas the grip element **4** is provided with a socket **6** having a closed end **7.**

The proximal ends of the grip elements **3** and **4** are adapted to overlap axially, this is provided by reducing the wall thickness of one of the grip elements as indicated by **8** and enlarging the bore of the other grip element as indicated by **9** so that the reduced wall **8** may telescope into the enlarged bore **9.**

The method of manufacture of the ski pole hand shield is as follows:

The enclosure **1** is molded with the grip elements **3** and **4** extending diametrically outward therefrom as shown in FIG. **3.** The hand enclosure is then turned inside-out causing the grip elements **3** and **4** to assume the position shown in FIG. **2.** The grip elements are then manipulated to interengage the reduced wall **8** and enlarged bore **9.** The adjacent ends of the grip elements may be cemented together. However, when an end **10** of a ski pole is inserted through the bore **5** of the grip element **3** and into the socket **6** of the grip element **4,** the grip elements are retained in alignment as indicated in FIG. **2.**

The external surfaces of the grip elements may be undulated to provide finger recesses **11.**

While a particular embodiment of this invention has been shown and described, it not intended to limit the same to the details of the construction set forth, but instead, the invention embraces such changes, modifications and equivalents of the various parts and their relationships as come within the purview of the appended claims.

We claim:

1. A ski pole hand shield, comprising:

a. an enclosure having an access opening and dimensioned to enclose a skier's hand;

b. a pair of hand grip elements within the enclosure disposed in coaxial relation, the grip elements having distal ends formed integrally with the enclosure, and proximal ends in confronting relation;

c. the hand grip elements forming jointly a socket penetrating a wall of the enclosure, for receiving an end of a ski pole.

2. A ski pole hand shield as defined in claim **1,** wherein:

a. one of the hand grip elements is open at both ends and the other hand grip element is closed at its distal end whereby, when a ski pole is received therein, the ski pole maintains the hand grip elements in alignment.

3. A method of manufacturing a ski pole hand shield comprising:

a. molding a flexible bulbous enclosure having an entrance opening;

b. molding integral therewith a pair of hollow hand grip elements projecting in opposite directions from the enclosure;

c. then turning the enclosure inside-out to place the hand grip elements inside the enclosure;

d. and then manipulating the hand elements into alignment to form a socket for receiving a ski pole.

* * * * *