

Aug. 10, 1965

G. K. DOVER

3,199,886

SKI POLE

Filed Nov. 14, 1963

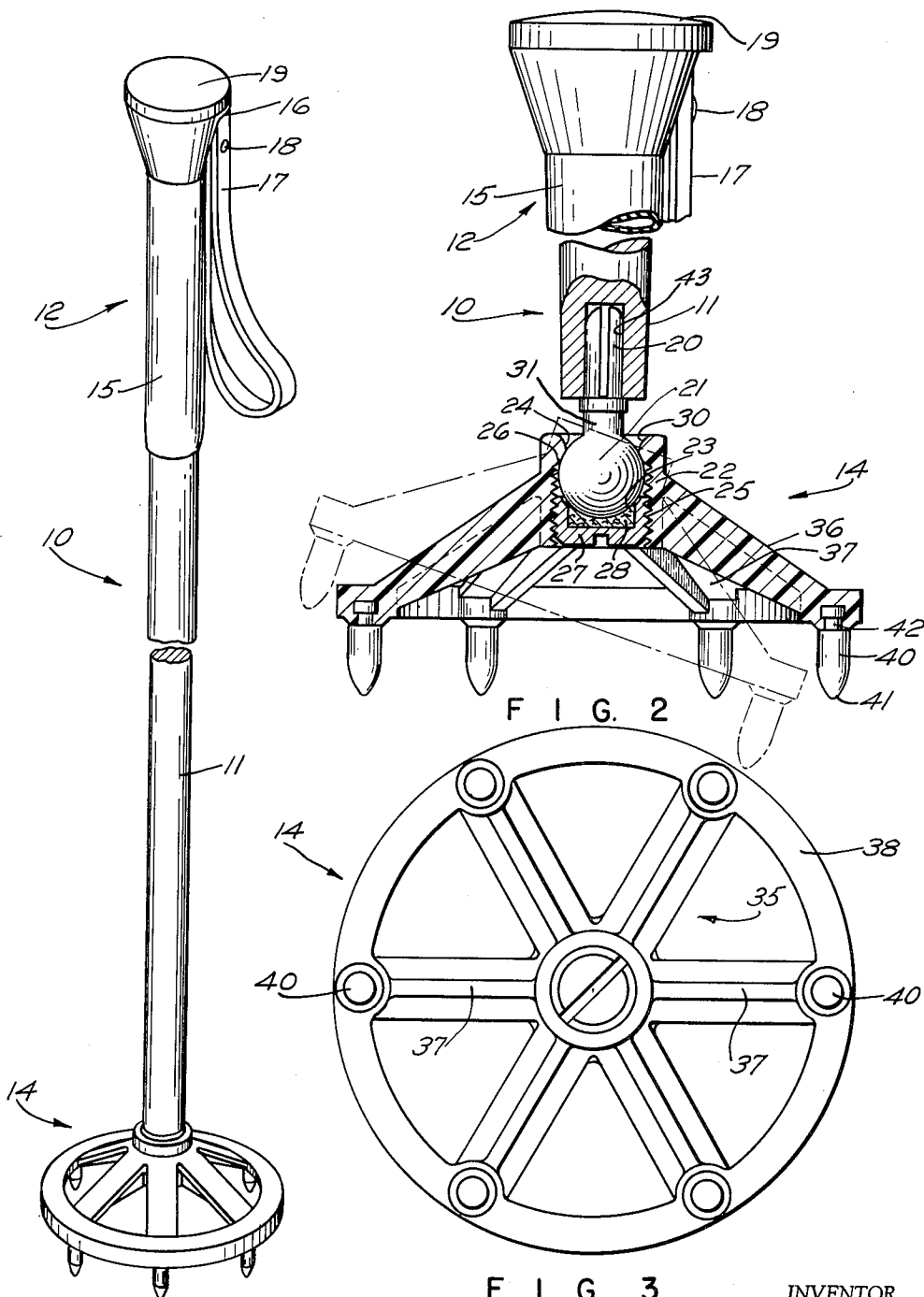


FIG. 1

FIG. 3

INVENTOR.  
GEORGE KENT DOVER  
BY

*Barlow & Barlow*  
ATTORNEYS

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3,199,886  
SKI POLE

George Kent Dover, Conway, N.H., assignor to  
Dynacone Inc., a corporation of Maine  
Filed Nov. 14, 1963, Ser. No. 323,722  
2 Claims. (Cl. 280—11.37)

This application is a continuation-in-part of my earlier filed pending application, Serial No. 143,799, now abandoned.

This invention relates to improvements in ski poles and more particularly to the ends of the pole to make it efficient and safe to use.

Ski poles are usually constructed with a central pole having a steel spike at the end thereof, and axially removed from this spike is a ring member which prevents the pole from being inserted too far into the snow. In the form which ski poles generally take, this device can readily be seen to be rather a lethal weapon and has been the cause of many injuries. The injuries are occasioned by the spike end of the pole gashing parts of one's body, and in collision type accidents one could be spiked by another's pole. Also when skiing a trail, the ring member frequently can become caught in brush, and this then will result in an accident occurring by upsetting the skier. Further the handle may gouge an eye which has happened.

It is accordingly an object of the present invention to obviate all of the aforementioned difficulties by providing a ring member and pole ends of an entirely different construction.

A more specific object of the invention is to provide a ring member which is at the terminal end of the ski pole and has provided integral therewith surface engaging spikes.

A further object of the invention is to provide a ring member at the terminal end of the ski pole which is of cup shape configuration to provide a greater purchase on soft snow by forcing the same into a hemispherical form.

A further object of the invention is to provide a ring member for a ski pole which is detachable from the pole should the ring member be caught in brush or stones or the like, thus preventing a spill.

A further object of the invention is to provide a handle member of a size which cannot enter and gouge an eye of a person.

Other advantageous features will be apparent in the following specification which will describe further novel features which are more fully pointed out in the appended claims.

In the drawing:

FIG. 1 is a perspective view of my new ski pole;

FIG. 2 is an enlarged sectional view of the ski pole along the longitudinal axis of the pole; and

FIG. 3 is a bottom plan view of the ring member.

Referring now to the drawing, 10 designates a pole consisting of a metal tube 11. An enlarged portion designated generally 12 serves as a handle portion at one end of the pole 10, and a ring member 14 is mounted at the other end of the pole. The handle portion consists of a molded sleeve 15 which is recessed as at 16 to receive the ends of a strap 17 that is secured therein by fastening means 18. The upper end of the sleeve 15 is enlarged to provide a knob-like member 19 that is preferably formed in a fashion to be extremely resilient to impact. In this fashion the knob member 19 will serve to protect one who might fall against the pole. The knob 19 is of a size large enough so that it will engage the bones on the opposite sides of the eye of a person so it will not enter and gouge an eyeball.

The metal tube 11 preferably is made from a noncorrosive type of alloy and frictionally receives in the lower end thereof a resilient split plug 20 carrying a ball end 21, the

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ball end being adapted to have the ring member 14 mounted thereon.

The ring member 14 has a central hub 22 with a ball socket 23 formed therein to receive and frictionally engage the ball end 21. The hub 22 has two different size bores 24, 25 extending axially therethrough providing a shoulder 26 between them which is shaped to provide a seat for the ball 21. The larger bore 25 is threaded to receive a cup shape plug 27 having a seat 28 to engage the ball 21 and provide friction thereon by turning the plug inward by slot 29 the desired amount. The smaller bore 24 is chamfered as at 30 at its upper end to permit the neck 31 of the ball to rock in its mounting. Radiating from this central hub are a plurality of spokes generally designated 35. Each of these spokes has a substantially flat upper surface 36 and a rib 37 extending downwardly therefrom to form a T cross section. At the outer termini of the spokes 35 a rim 38 is formed, and as will be seen by referring particularly to FIG. 2, this rim 38 is axially displaced from the hub 22 so that the entire structure presents an inverted cup-like shape. Received at radially spaced locations of the rim 38 are a plurality of pins 40 which may each consist of a cylindrical rod with a sharpened point as at 41 and a reduced neck 42 that is molded integrally in the rim 38 or is received therein in diverse other ways.

It will be apparent that when the ring member is received on the end of the pole that it may rock about the ball 21 as is shown in broken line in FIG. 2. To achieve maximum rocking of the ring member, it will be noted that the post 20 has a reduced neck portion as at 31. This rocking motion not only enhances the use of the pole at varying angles as in hiking but also will tend to rotate the ring member to a position out of direct impact so that the pole would give a glancing blow upon striking another object.

A great safety feature will be noted in the construction of the ring end and particularly the spikes mounted on the periphery of the rim 38. From a relative standpoint these spikes are much smaller than the central spike provided on the usual ski pole now in use, and even if they do strike another skier would not penetrate his body and clothing to a degree to cause serious injury, giving only a superficial wound if any wound is inflicted at all. Additionally, as has been briefly alluded to above, the axial displacement of the rim 38 with respect to the hub 22 achieves an inverted cup shape proportion which will tend to pack the snow engaged by the ring member much the same as one with a cupped hand would grasp snow and form a snowball. This provides a rather good packing engagement with light snow and together with the downwardly facing ribs 37 will provide excellent purchase on practically every type of snow, except hard packed crust which may be penetrated by the spikes 40 to provide the necessary surface engagement with such hard pack cover. Further by providing a knob 19 on the end of the handle of a size larger than the bones on either side of the eye opening in the head of a person, the danger of serious injury to the eye is minimized.

Further, should the ring 14 become caught in brush or other entanglement, a strong pull on the handle will dislodge the ring from the handle by the resilient plug 20 pulling out of the bore 43 in the end of the shank 10 of the pole.

The leather seat 28 also provides for good frictional rocking of the ball 21 in its seat.

I claim:

1. A ski pole having a handle end and a snow engaging end, said snow engaging end comprising a ring member secured to the terminal end of the pole, said ring member comprising a central hub with a plurality of radiating spokes disposed at an obtuse angle to each other in a plane

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passing through the axis of said hub and extending in a generally downward direction from said hub, each spoke having a downwardly projecting rib of substantial width compared to the thickness of the spoke, a peripheral rim terminating the end of each spoke, and a plurality of pins on said rim, each pin projecting downwardly from the rim member at the junction of the spokes and the rim.

2. A ski pole comprising a shank with a bore in its lower end, a ring member, means detachably connecting the ring member to said shank comprising a shouldered stud having a resilient plug entering and frictionally engaging the walls of said bore to detachably hold the plug therein.

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A. HARRY LEVY, *Primary Examiner.*