April 16, 1963 E. L. SCOTT 3,085,814

HANDLE CONSTRUCTION FOR SKI POLES

Filed Dec. 2, 1960

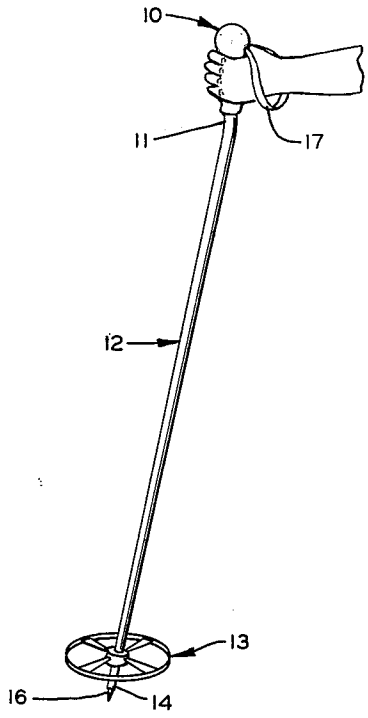


FIG. 1.

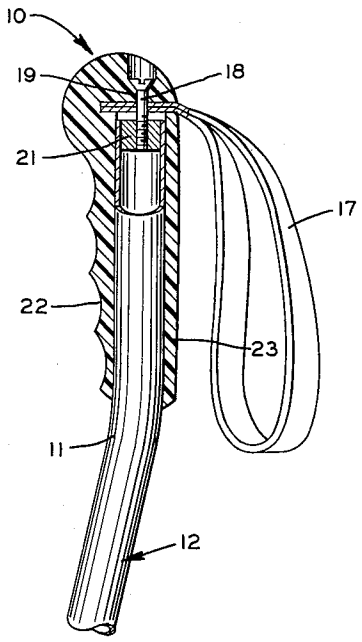


FIG. 2.

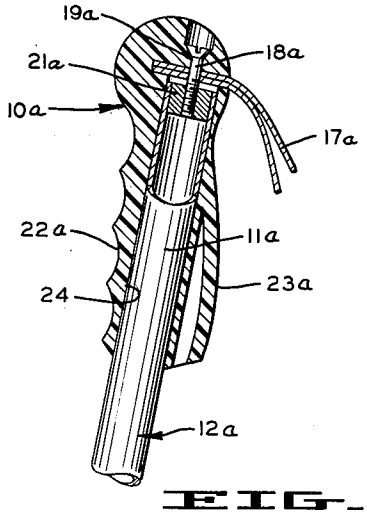


FIG. 3.

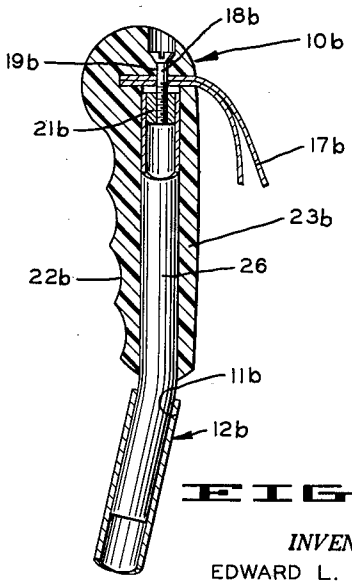


FIG. 4.

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United States Patent Office 3,085,814 Patented Apr. 16, 1963

3,085,814

HANDLE CONSTRUCTION FOR SKI POLES

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Filed Dec. 2, 1960, Ser. No. 73,235
3 Claims. (Cl. 280—11.37)

This invention relates to improvements in handle construction for ski poles and more particularly to handles intended to increase the ease of manipulation of the pole.

The ordinary ski pole is straight and the handle is mounted in co-axial relation to the upper end of the pole. From the standpoint of the skier, this structure is adequate when he is thrusting against the poles, but presents certain problems when he is extending the poles forward in preparation for the next thrust.

The configuration of the human hand and arm is such that extending the pole forwardly of the skier requires considerable bending of the wrist and elbow. Moreover, the muscles brought into play by such action are relatively weak and tire easily.

The present invention contemplates a ski pole in which the handle is mounted at an angle relative to the major portion of the pole so that the pole will extend forwardly when the handle is held in upright position. This permits the pole to be used in the normal manner but makes it possible to accomplish forward reaching of the pole with a minimum of strain and effort.

Accordingly it is a principal object of the present invention to provide a handle construction for a ski pole which minimizes strain and effort on the part of the skier but which does not interfere with the normal action of the pole.

Another object of the present invention is to provide a ski pole handle of the character described which is sturdy and simple to construct, light in weight, and attractive in appearance.

A further object of the invention is to provide a ski pole handle of the character described which does not require bending or deformation of the shaft of the ski pole.

Yet another object of the present invention is to provide a handle for ski poles which may be mounted on the upper end of a ski pole shaft and which will hold the hand of the skier in angled relation with respect to such shaft.

Further objects and advantages of my invention will be apparent as the specification proceeds, and the new and useful features of my handle construction for ski poles will be fully defined in the claims hereto attached.

The preferred forms of my invention are illustrated in the accompanying drawing, forming part of this application, in which:

FIGURE 1 is a perspective view of a ski pole having a handle constructed in accordance with the present invention;

FIGURE 2, an enlarged vertical cross-sectional view of the handle portion of the ski pole illustrated in FIGURE 1;

FIGURE 3, a vertical cross-sectional view through another form of the ski pole handle of the present invention; and

FIGURE 4, a vertical cross-sectional view through a third form of ski pole handle.

While I have shown only the preferred forms of my invention, it should be understood that various changes or modifications may be made within the scope of the claims hereto attached, without departing from the spirit of the invention.

Referring to the drawing in detail, the ski pole handle **10** of the present invention is secured to the upper end **11** of an elongated shaft **12** which has a flattened snow-

engaging member **13** secured adjacent to its lower end **14**, the handle **10** being mounted at an obtuse angle with respect to the major portion of shaft **12**.

The shaft **12** may comprise any suitable type of ski pole shaft and may be made of any suitable material, the shaft **12** here being formed of a light metal in a hollow tapered configuration. A shaft of this character is more fully described in my co-pending Application Serial No. 75,306 filed December 12, 1960 now Patent No. 3,076,663 issued February 5, 1963 and entitled Ski Pole Construction.

The snow-engaging member **13** may also be of any suitable form and is here illustrated as comprising a conventional basket ring. The usual sharpened snow-penetrating point **16** may be secured in the lower end **14** of the shaft **12**.

The handle **10** may be formed of any suitable material such as leather, gutta percha, wood, plastic, or the like. However I prefer to mold the handle from a tough, resilient material such as Geon plastic or neoprene, having a hardness rating of approximately 50 on the durometer scale.

Also, a conventional wrist strap **17** is incorporated into the handle **10** and may be of suitable material such as leather or flexible plastic. I prefer to secure the wrist strap **17** in place by means of a bolt or screw **18** mounted in a bore **19** formed in the handle and threadably engaged in a member **21** secured in the upper end **11** of the shaft **12**.

In accordance with the present invention and as an important feature thereof, the handle **10** is angularly related to the shaft **12** in such manner that the shaft will extend forwardly when the handle is held upright in the manner illustrated in FIGURE 1. In the form of the invention illustrated in FIGURE 2, the upper end **11** of shaft **12** is angled with respect to the major portion of the shaft as by bending or the like. The bending should be done with an internal mandrel to avoid flattening and weakening the shaft.

To insure a good grip on the handle by the hand of the skier, the forward side **22** of the handle may be formed with serrations providing finger grips, and the rear side **23** is formed to nest snugly in the hand of the skier. The sides **22** and **23** are formed so that when the skier grasps the handle in a normal manner, the handle will be substantially upright in the position shown in the drawing, and the shaft **12** will extend downwardly and forwardly substantially as shown.

A modified form of the invention is illustrated in FIGURE 3, wherein the upper end **11** of the shaft **12** remains straight and the handle **10*a*** is formed to provide the desired angled relationship. The upper end **11*a*** of the shaft **12*a*** fits snugly into a cylindrical chamber **24** and is held therein by a bolt or screw **18*a*** engaged in the member **21*a*** in a manner similar to the securing means illustrated in FIGURE 1.

In the form illustrated in FIGURE 3, the handle **10*a*** is deep enough to permit the chamber to be formed at the desired angular relation to the front and rear sides **22*a*** and **23*a***, respectively. Thus when the handle **10*a*** is held in the upright position illustrated in FIGURE 3, the shaft **12*a*** will extend forwardly therefrom at the desired angle with no necessity for bending the shaft.

The form of the invention illustrated in FIGURE 4 incorporates a handle **10*b*** which is similar in all respects to the handle **10** illustrated in FIGURE 2. However, instead of bending the shaft **12*b***, the handle **10*b*** is mounted on a shaft extension **26** which is bent to provide the desired angled relationship between the handle and shaft. Member **26** is preferably formed of hollow lightweight tubing and is secured in the upper end **11*b*** of

shaft 12*b* by welding, swaging, press fit, or any other suitable securing means.

From the foregoing it will be apparent that I have provided a novel handle construction for ski poles which is simple, sturdy, light in weight, and which affords an improved action by making it possible for the skier to extend the pole forwardly with more facility and ease than has heretofore been possible.

I claim:

1. A ski pole, comprising an elongated shaft, a flattened snow-engaging member adjacent to the lower end of said shaft, and a manually engageable elongated handle at the upper end of the shaft, said handle having forward and rearward sides adapted for engagement by the fingers and palm of the hand and being formed with a cylindrical chamber fitting over the upper end of said shaft, said chamber being angled with respect to said forward and rearward sides of said handle whereby said shaft will extend forwardly and at an obtuse angle with respect to said handle.

2. A handle for a ski pole, comprising an elongated hand-engaging portion having a serrated forward side and a rearward side formed for engagement with the palm of the hand, an enlarged knob secured to the upper end of said hand-engaging portion, said hand-engaging portion being formed with a cylindrical chamber extending longitudinally therethrough in angled relation to said forward and rearward sides, said chamber being formed

to receive the upper end of the ski pole shaft whereby such shaft will extend forwardly from said handle, and means for securing said handle to said shaft.

3. A handle for a ski pole, comprising an elongated hand-engaging portion having forward and rearward sides formed for engagement with the fingers and palm of the hand respectively, said hand-engaging portion being formed with a cylindrical chamber extending longitudinally therethrough in angled relation to said rearward side so as to be spaced further from the rearward side at the lower end of the hand-engaging portion than at the upper end, said chamber being formed to receive the upper end of a ski pole shaft whereby such shaft will extend forwardly with respect to said rearward side of the handle.

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