

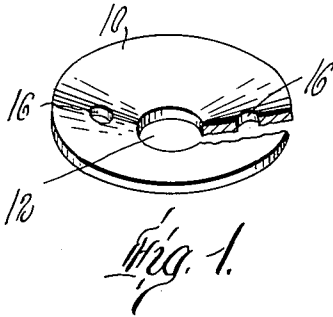
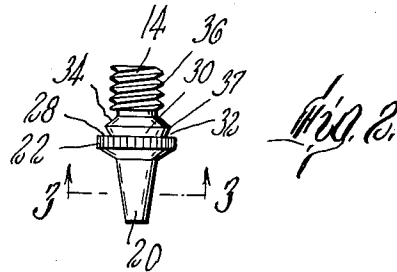
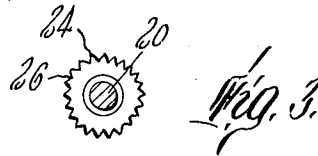
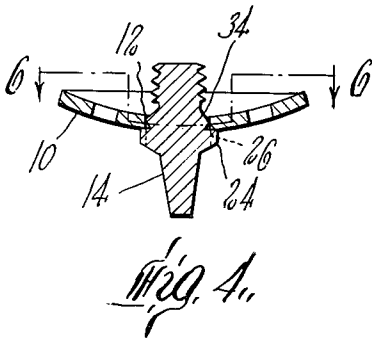
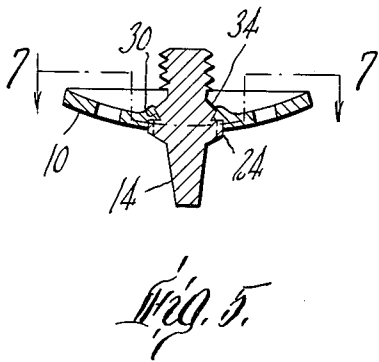
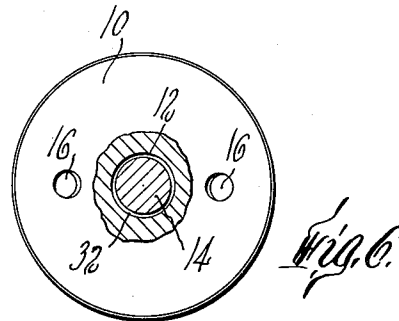
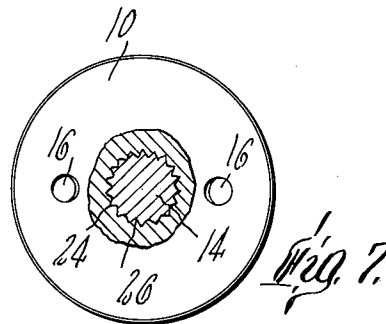
Nov. 8, 1955

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2,722,757

CALK FOR GOLF SHOE

Filed Feb. 8, 1954



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2,722,757

CALK FOR GOLF SHOE

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Application February 8, 1954, Serial No. 408,750

2 Claims. (Cl. 36—59)

This invention relates to an improved two-piece calk for golf shoes. A somewhat similar calk is described and claimed in my Patent No. 2,578,591, granted December 11, 1951, and has proved to be satisfactory in use and a successful article of commerce. An object of the present invention is to provide an improved calk which is more rugged and can be manufactured with more uniformity of quality. The patented calk comprises a disc of soft steel pressed or driven onto a hardened steel spike member. The latter has a short serrated portion terminating at a shoulder formed by a radial flange. The disc is pressed on the serrated portion until it reaches the shoulder. If correctly assembled the result is an excellent calk although it can come apart in the unusual event of a strong force being brought to bear on the disc in a direction opposite to that of the force applied thereto in assembling the parts, a circumstance which can happen but rarely when the calk is in use on a shoe. For a good bond between the disc and spike member, the serrations must be clean and sharp. Since the serrations end at a shoulder uniform cleanness of the serrations is not easy to attain when the calk is being manufactured in large quantities.

The improved calk is a two-piece structure with all the advantages inherent in a structure of that kind. In addition, the assembled parts are firmly locked against separation regardless of the direction of the force applied. Moreover the spike or stem part is more readily made since the grooves of the serrated portion are open at both ends instead of having one end at a shoulder. Since the flange of the earlier form is eliminated, the serrated portion can be made with a greater diameter and therefore with a greater circumference, thus increasing the strength of the lock.

For a more complete understanding of the invention reference may be had to the following description thereof, and to the drawing, of which—

Figure 1 is a perspective view of the disc member of a calk embodying the invention, a portion being broken away;

Figure 2 is an elevational view of the stem member;

Figure 3 is a section on the line 3—3 of Figure 2;

Figure 4 is a section, on a vertical plane, of the two members in the process of being assembled;

Figure 5 is a section similar to Figure 4 but after the assembling of the members has been completed;

Figure 6 is a section on the line 6—6 of Figure 4; and

Figure 7 is a section on the line 7—7 of Figure 5.

The improved calk consists of a disc 10 which has a central aperture 12, and a stem member 14. The disc is made of a relatively soft metal such as soft steel and is preferably slightly cupped or dished as shown on the drawing. Other details such as holes 16 for a wrench may be included.

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The stem member 14 is preferably of hardened steel and has a frusto conical ground-engaging portion 20 with a gradual taper. At the base of the frustum 20 the member expands to its maximum diameter, the portion 22 of maximum diameter being short and serrated with a series of teeth 24 which extend parallel to the axis of the member and alternate with grooves 26 which are open at both ends. The serrated portion 22 (Figure 2) terminates at its upper end in an annular surface 28 which with the adjoining flaring portion 30 of the member forms a deep circumferential V-groove 32. The member then tapers, as at 34 to a screw-threaded portion 36 adapted to screw into a threaded socket (not shown) mounted in the sole of a shoe. The flaring portion 30 and tapering portion 34 form a circumferential rib 37 which has a diameter substantially equal to the root diameter of the serrated portion 22, that is, the diametrical distance between mutually opposite grooves 26 in the serrated portion.

The aperture 12 of the disc 10 has a diameter substantially equal to the root diameter of the serrated portion 22 of the stem member 14 and therefore substantially equal to the diameter of the rib 37. When a disc is placed on a stem member 14 as indicated in Figure 4, the tapering surface 34 guides it to a position in which it is accurately centered with respect to the axis of the member 14 when it meets the serrations of the portion 22. When the disc is forced down to the position shown in Figure 5, the hard teeth 24 push up through the lower portion of the disc and displace upwardly the corresponding small portions of the upper portion of the disc adjacent to said central aperture. The die (not shown) which presses the disc down is so shaped as to force the upper portion of the disc adjacent to the central aperture into tight engagement with the stem member 14 in the groove 32, thereby locking the disc securely in the position on the stem member shown in Figure 5 so that the member cannot be separated from the disc by force exerted thereon in either direction unless such force is of the order of a ton in magnitude.

I claim:

1. A calk for an athletic shoe or the like, comprising a metal disc having a central aperture, and a stem member of harder material than the disc extending through said aperture, said stem member having in order a frusto-conical ground-engaging portion merging into a short serrated portion which is the portion of greatest diameter, a narrow circumferential groove, and a screw-threaded stem, the lower portion of said disc being tightly engaged on the upper portion of said serrated portion and having the upper portion of said disc tightly engaged in the said groove.

2. A stem member for a golf-shoe calk, said member having a ground-engaging portion at one end, a screw-threaded portion at the other end, and an intermediate portion including a serrated portion of greater diameter than the end portions and a circumferential rib between the serrated portion and the threaded portion forming a narrow circumferential groove just above the serrated portion, said rib having a diameter substantially equal to the root diameter of the serrated portion.

References Cited in the file of this patent

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2,523,652	Dowd et al.	Sept. 26, 1950
2,578,591	Phillips	Dec. 11, 1951