

March 9, 1954

H. T. GOODWIN
GRIP FOR GOLF CLUBS

2,671,660

Filed July 12, 1949

2 Sheets-Sheet 1

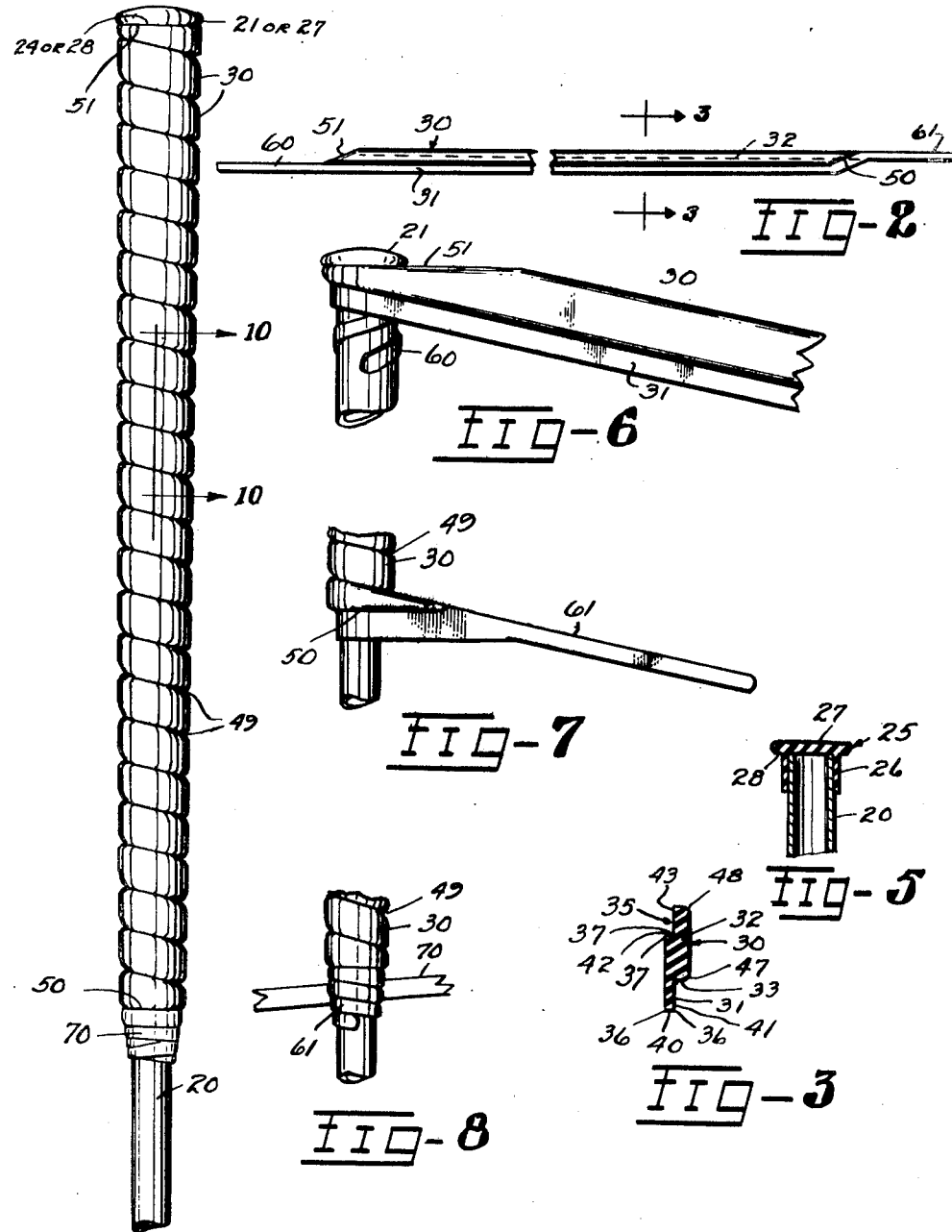


FIG-1

FIG-4

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2 Sheets-Sheet 2

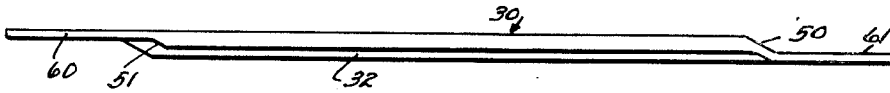


FIG-9

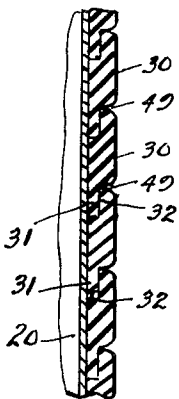


FIG-10

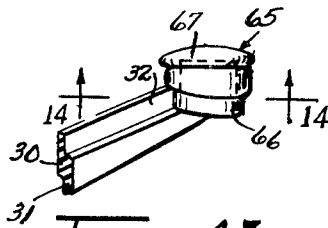


FIG-13

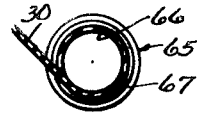


FIG-14

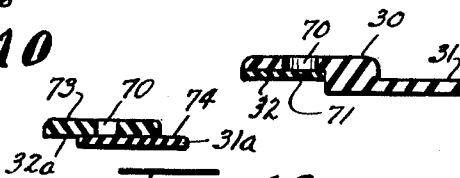


FIG-15

FIG-16

FIG-11

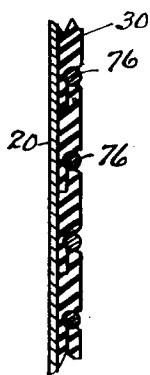
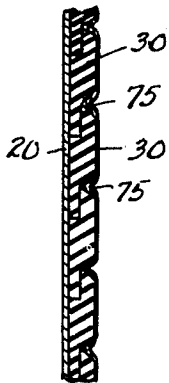


FIG-12

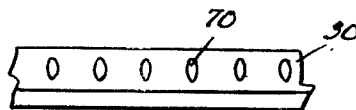


FIG-17

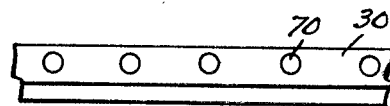


FIG-18

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2,671,660

GRIP FOR GOLF CLUBS

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mesne assignments, to C. S. I. Sales Company,
Cleveland, Ohio, a corporation of Ohio

Application July 12, 1949, Serial No. 104,227

5 Claims. (Cl. 273-81)

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This invention relates to improvements in grips for golf club shafts and the like and particularly to an improved grip which can be readily applied to the shaft and which will permit the shaft to be firmly and easily held without turning or slipping. These, therefore, are the general objects of the present invention.

A more specific object of this invention is to provide a grip for a golf club shaft which may be readily manufactured and which may be readily applied to the shaft without the use of a cement between the club shaft and the grip, and which when applied will facilitate the holding of the shaft.

Another object of this invention is to provide a preformed strip of resilient material, such as rubber, which may be wrapped spirally about the shaft of a golf club or the like and which may be so wrapped as to eliminate or avoid the use of an adhesive material between the shaft and the strip and yet which will not slip relative to the shaft when in use.

Another object is to provide a grip for a golf club or the like having the advantages above mentioned, which may be readily used as a replacement for existing grips, and which will be attractive in appearance and provide a satisfactory "feel."

Other objects and advantages of this invention will become more apparent from the following description reference being made to the accompanying drawings which illustrate preferred examples of the invention. The essential features of the invention will be summarized in the claims.

In the drawings, Fig. 1 is a fragmentary view of a golf club shaft having the improved grip of this invention; Fig. 2 is a plan view of the preformed strip of resilient material which forms the improved grip; Fig. 3 is a sectional view of the strip, the plane of the section being indicated by the lines 3-3 in Fig. 2; Figs. 4 and 5 are views, partially in section, illustrating different forms of caps or tip pieces which may be used in connection with the improved grip; Fig. 6 is a view of the club shaft and illustrates the manner in which the winding of the strip is started; Fig. 7 is a fragmentary view of a club shaft and illustrates the manner of winding of the strip as it nears completion; Fig. 8 is a view similar to Fig. 7, illustrating the strip completely wound and ready to be secured in place; Fig. 9 is a bottom view of the strip illustrated in Fig. 2; Fig. 10 is a fragmentary section through the wound shaft, the plane of the section being in-

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dicated by the lines 10-10 on Fig. 1; Figs. 11 and 12 are fragmentary sections, similar to Fig. 10 but illustrating the application of a decorative or reenforcing winding; Fig. 13 is a fragmentary perspective view of a modified form of grip wherein the cap or tip piece is formed integral with the grip itself; Fig. 14 is a sectional detail as indicated by the lines 14-14 on Fig. 13; Figs. 15 and 16 are sectional views of modified forms of strip; Fig. 17 is a fragmentary plan view of a modified form of strip; and Fig. 18 is a plan view of the strip shown in Fig. 17 tensioned for application to the club shaft.

The invention has been illustrated in the drawings as applied to a conventional steel golf club shaft 20. These shafts are tubular and are tapered, sometimes in graduated section, toward the lower end of the shaft to which a head, not shown, is affixed in the usual manner. Generally the upper end of the tubular shaft is closed by a cap or tip piece 21.

A conventional cap, shown in Fig. 4, comprises a plug portion 22 which is driven into the open end of the shaft and a button-like tip portion 23 which overlies the top of the shaft and provides a flange 24 against which the grip material is seated.

An improved cap 25, especially adapted for use in the present invention, is shown in Fig. 5. The improved cap comprises a tubular or cup-like portion 26 into which the upper end of the club shaft is inserted, and a cap portion 27 having a downwardly facing flange 28 against which the upper end of the grip is abutted. This cap is made of a resilient material such as rubber or a rubber-like composition and snugly engages the shaft.

The improved grip comprises an elongated preformed strip 30 of rubber or resilient rubber-like material having a surface which, when stretched, provides sufficient friction to assist in retaining the strip on the shaft and provides an outer surface which may be readily gripped and which has a highly satisfactory "feel". The strip 30 is preferably molded and is provided with a substantially longitudinal flange 31 which extends the entire length of the strip. The under surface of the flange is contiguous or flush with the under surface of the body portion 32 of the strip. The flange 31 is materially thinner than the body portion 32 of the strip and forms substantially a right angle with the body portion of the strip, as indicated at 33 in Fig. 3.

The bottom of the body portion 32 of the strip 30 is provided with a longitudinal undercut or

groove 35 along the longitudinal edge thereof opposite the flange 31. The dimensions of this groove are identical with those of the flange 31 so that when wrapped about the shaft the groove will overlie the flange and be completely filled thereby. The outer corners 36 of the flange and the inner corners 37 of the groove are both substantially ninety degrees. Thus when wrapped spirally about the shaft as shown in Figs. 1 and 10 the surfaces 40 and 41 of the flange about the surfaces 42 and 43 respectively of the groove and prevent relative movement of the strip axially of the shaft 20. The outer corners 47 and 48 of the body portion 32 are rounded and coact to provide a spiral groove 49 when the strip is wound about the shank.

The ends of the body portion 32 of the strip are beveled as shown at 50 and 51. The angle of this bevel is such that when spirally wound about the shaft the beveled surface 51 lies in a plane normal to the axis of the shaft 20 thus enabling it to abut the shoulder 24 or 28 of the cap 20 or 25. The other beveled surface lies in a similar plane so as to facilitate fastening thereof to the shaft as indicated in Figs. 7 and 8.

The flange 31 extends some distance to either end of the body portion 32 as shown at 60 and 61. The end 60 of the flange 31 is comparatively thin, and is wrapped about the shaft as shown in Fig. 6 until the beveled portion 51 engages the flange of the cap whereupon the strip is spirally wound about the shaft atop the end of the flange.

The strip is stretched as it is wound so that it tightly engages the shaft and is wound with the groove 35 at the top and the flange 31 toward the bottom of the shaft. Thus the portion of the strip overlaying the flange 31 will retain the strip in position on the shaft. This, together with the abutting edges heretofore mentioned, prevents any creeping or relative movement between the strip and the shaft and avoids the necessity of using cements or adhesives as has been the custom in the past.

When the strip is completely wound the extension 61 of the flange 31 is wound about the shaft and, as indicated in Fig. 8, thereafter wrapped with a band of adhesive tape 70 or bound with twine at its lower end in the usual manner to form a complete grip as shown in Fig. 1.

When the cap or tip 25 of Fig. 5 is used the tensioned strip 30, when wound about the tubular portion 26 of the cap, retains the latter in position on the shaft.

In Figs. 13 and 14 I have shown a modified form of grip. In this form, the extension 60 at the leading end of the flange 31 is omitted and a cap portion 65 is moulded integrally with the strip at its leading end. This cap portion includes a cylindrical sleeve portion 66, adapted to embrace the end of the shaft, and a closing cap portion 67.

In Figs. 15 and 16 I have illustrated embodiments which may be used when a decorated grip is desired. In these embodiments the body portion of the strip is provided with a series of openings or perforations 70 which extend through the strip. These perforations are preferably substantially elliptical as shown in Fig. 17, so that when the strip is tensioned during winding, they will become substantially circular, as shown in Fig. 18.

In the form illustrated in Fig. 15 the openings 70 extend through that portion of the strip overlaying the groove 35 and are covered by an elongated strip 71 of rubber or a rubber-like material

differing in color from that of the main portion of the strip. In this form the groove 35 is of such depth, that when the strip 71 is applied, it will be completely filled by the flange 31. The strip 71 may be secured to the strip 30 either by cement or by vulcanization.

In the form shown in Fig. 16 the strip comprises a body portion 73 of substantially the same thickness throughout substantially its entire length and provided with openings 78 which extend therethrough. A second strip of material 74 of the same width as that of the strip 73 but somewhat thinner is secured to the bottom of the strip 73. The strip 74 is offset transversely of the body portion 73, thus providing a tongue 31a and a mating groove 32a. The strip 74 may be secured to the strip 73 by vulcanization or by cement, as desired, and is preferably of a contrasting color.

The grip may be decorated by winding a thin rubber ribbon 75 in the groove 49 as indicated in section in Fig. 11. This ribbon is of a contrasting color or tone relative to that of the body portion of the strip, thus providing an attractive grip.

A reinforcing winding 76 may be seated in the spiral groove 49. This winding may be "nylon" or stranded wire and is wound about the groove under considerable tension so as to reinforce the shaft and increase the adhesion between the shaft and grip.

While I have illustrated and described my improved grip as used in connection with a golf club, it is obvious that it may be used for hand grips for clubs, bats, and implements of various types when a wrapped grip is desirable.

I claim:

1. A handle grip comprising, a single homogeneous longitudinally stretchable elongated strip of stretchable rubber-like material to be spirally wound about a handle and having an elongated flange extending outwardly and along one longitudinal edge thereof, the under surface of said flange being a continuation of the under surface of said strip, said strip having a longitudinally extending recess in its bottom adjacent the edge thereof opposite said flange, the cross sectional area of said flange and recess being substantially identical, the ends of said strip being cut on a bias and each terminating in elongated anchoring portions having a width relatively narrower than the width of the major strip portion and extending generally parallel therewith.

2. In combination with a handle and a headed cap telescopically engaging one end of said handle, a surface grip therefor comprising a single homogeneous, longitudinally stretched strip of rubber-like material having one end overlapping itself closely adjacent the capped end of the handle to anchor the end on the handle and the remaining portion thereof extending spirally about the handle in stretched condition and grasping the handle without the aid of adhesive, said spirally stretched strip having its other end anchored to the handle in spaced relation from the first end, said strip between its ends having a longitudinal flange extending outwardly along one longitudinal edge thereof, the undersurface of said flange being a continuation of the strip under surface, the longitudinal edge of said strip opposite said flange having a longitudinal recess in its bottom of substantially the same cross sectional area as said flange, said recessed longitudinal edge overlying the flanged longitudinal edge

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on the handle to present a substantially level grip surface throughout its length on said handle.

3. The combination of claim 2, wherein at least said overlapping end of the strip terminates in an elongated portion having a width relatively narrower than the width of the major strip portion, said elongated portion encircling the handle to effect said overlapping.

4. In combination with a handle, a surface grip therefor comprising a single homogeneous longitudinally stretched strip of rubber-like material having one end anchored on the handle and the remaining portion thereof extending spirally about the handle in stretched condition and grasping the handle without the aid of adhesive, said spirally stretched strip being anchored to the handle at its other end in spaced relation from the first end, said strip having a longitudinal flange extending outwardly along one longitudinal edge thereof, the under surface of said flange being a continuation of the strip under surface, the longitudinal edge of said strip opposite said flange having a longitudinal recess in its bottom of substantially the same cross sectional area as said flange, said recessed longitudinal edge overlying the flanged longitudinal edge to present a substantial level grip surface throughout its length on said handle, the ends of the strip being cut on a bias and at least said one end terminating in an elongated strip extending beyond the major portion of the strip at one end thereof and encircling the handle to anchor the strip thereto at said one end.

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5. A handle grip comprising a single homogeneous longitudinally stretchable elongated strip of stretchable rubber-like material to be spirally wound about a handle and having an elongated flange extending outwardly and along one longitudinal edge thereof, the under surface of said flange being a continuation of the under surface of said strip, said strip having a longitudinally extending recess in its bottom adjacent the edge thereof opposite said flange, the cross sectional area of said flange and recess being substantially identical, the ends of said strip being formed on a bias and at least one of said ends terminating in an elongated anchoring portion having a width relatively narrower than the width of the major strip portion and extending generally parallel therewith.

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