To all whom it may concern:

Be it known that I, ALLAN E. LARD, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Grips or Handles, of which the following is a specification.

My present invention pertains to an improved grip or handle, the construction and advantages of which will be hereinafter set forth, reference being had to the annexed drawings, wherein:

Figure 1 is a vertical sectional view of one form of the handle, the lower portion of the grip-element being shown free or in that position which it assumes when it is being wound in place; Fig. 2 an elevation of the completed handle of the form shown in Fig. 1; Fig. 3 an elevation of a portion of a stick or club, showing the grip applied directly thereto, with the finishing cap and ferrule in section; Fig. 4 a side elevation, showing a modified form of means for securing the grip in place; Fig. 5 a perspective view illustrating the tool employed for positioning such finishing or retaining means; Fig. 6 a sectional elevation of a modified form of the grip member; and Fig. 7 a side view showing the grip as applied to a bat.

The object of the present invention is to provide a grip which will, under all conditions of weather and until worn out, prevent the hands from slipping, and one which at the same time will be durable and likewise pleasant to the feel and easy upon the skin.

The grip is applicable to the handles of various playing or sporting clubs or implements, and while particularly adapted for use in connection with golf-clubs it has a wide field of application and may be placed upon any handle adapted to be gripped and held by a person.

It is well known to all users of golf-clubs that temperature, wind and moisture conditions affect the grip, and it is common to apply various sticky materials to the handle of the golf-club or the like during the varying conditions, in an effort to secure a grip which will not slip, a feature very essential in the playing of golf. There have been proposed grips which are more or less sticky or tacky in their nature, or which have corrugated or pebble surfaces, all of which wear smooth in a very short time.

Rubber grips have been proposed, generally in the form of a tubular sleeve designed to be drawn down over the end of the shaft. These when thin have no durability, and when thicker allow the hands to move with the rubber as the latter yields under action. When made firm by using rubber less pure they soon wear stick.

The application of the sticky or tacky material to the grip during play is more or less objectionable, being frequently too sticky when first applied and not sufficiently sticky after a little use, the grip rarely feeling or being twice the same. In cold weather it is quite useless. Moreover, the use of such material is both hard on the hands and unpleasant to the touch.

Most club-grips which are now in use are wound in strip form spirally about the handle of the club, the contiguous edges of the strip overlapping. Such construction has its objections, for the reason that various portions of the body of the strip may move lengthwise of the handle, this deforming the same and presenting edges which under the grip of the user will curl up and thus affect the contour and evenness of the grip.

Under the present construction no thin edges are present and the structure is such that there will be no displacement of the various convolutions of the grip-member. Furthermore, the grip will be efficient under various conditions being found particularly efficient in wet weather, when it is impossible to keep the handles of clubs or the like dry.

In a broad sense the grip may be said to comprise a rubber member wound spirally about the shaft or supporting element, the contiguous edges of the convolutions presenting a rounded or convex surface, so that there are no thin edges or ridges which can in use turn upwardly or outwardly.

In the preferred form of the grip member it comprises a tube secured at one end to the shaft or sustaining element, and wound spirally under sufficient tension to flatten the same around the shaft, and prevent any undue movement or stretching of the rubber under the action of the hands, the opposite end being likewise secured in place when it is brought in its flattened condition down upon the shaft or sustaining member. Suitable finishing elements will be
provided to cover the upper and lower ends of the grip. These will be of such a nature as to require no further attention or repair. In the ordinary grip the ends are projected and held by thread wrapping. These are constantly wearing out and becoming loose.

Referring first to the construction shown in Figs. 1 and 2, 1 denotes a tubular sleeve or member formed of pastebord or the like, and about which there is spirally wound a rubber tube 2, said tube being placed under such tension as it is wound about the sleeve so as to flatten the tube and bring it into the condition before referred to and shown most clearly in the sectional portion of Fig. 1. The upper end of the tube may be fastened in any way, as by a tuck 3 or a staple 4, or both, and the lower end secured in a similar manner, as shown in Fig. 2. Prior to the positioning of the rubber tube upon the sleeve, the latter may have applied thereto a coating of waterproof glue, rubber cement or the like, although in practice this has not been found necessary in order to retain the tube in its position upon the sleeve. A rubber cap 5, the lower end of which is tapered and rounded, will preferably be drawn over the upper end of the sleeve and the first few convolutions of the tube or rubber member. A grip formed in this manner may be sold as an article of manufacture and placed upon the shaft of a golf-club by almost anyone, the use of glue or a suitable cement insuring a rigid connection between the shaft and the sleeve.

The grip may be applied directly to the shaft, as in Fig. 3. The upper end of the grip or tubular member designated by 2, as in the other figures, will be secured to the shaft 6, by a staple 7, or any other suitable fastening means. It will be wound around the shaft with the adjacent edges of the convolutions in contact with each other throughout the length of the grip, the rubber tube being placed under sufficient tension to flatten the same and cause it to bind firmly upon the shaft, for reasons before explained. As in the other construction, a cap-piece, preferably of rubber, will be placed over the upper end and secured thereto by a screw 5 in the butt of the shaft, and a rubber sleeve, as 8, drawn over the lower end of the grip, likewise extending for a slight distance downwardly upon the shaft. The sleeve will be so formed as to present an even surface throughout. The sleeve 8 is slipped on the shaft before the tube is applied.

In Figs. 4 and 5 a similar grip is shown, but a different means of fastening the same is illustrated. About the upper end of the shaft and the upper portion of the grip, there is secured a split ring 9, said ring being forced to place by a suitable tool, as shown in Fig. 5. The outer ends of the jaws of the tool are slotted, as at 10, in order that screws 11 may be passed through openings formed in the ends of the ring, while the ring is held in its closed or tightened position. A similar ring 12, somewhat wider and having the form of a split sleeve, will be secured around the lower portion of the grip. The rubber cap and sleeve 5 and 8, are, however, preferred. They may be readily positioned without the use of any tool, and if found necessary secured in place by a suitable cement.

It is not essential, in the broader aspect of the invention, that the grip should be formed of a tube. It may be made of a flat strip, having rounded edges, or a strip of rubber doubled upon itself, as shown in Fig. 8, said strip being designated by the reference numeral 13. The surface of said strip may be roughened by forming thereon a series of rounded projections 13*, which can be produced when the strip is made. In both forms it will be noted that there are no thin or projecting edges which can be displaced in use, particularly where one grips the club with the thumb of the upper hand extending downwardly along the grip beneath the other hand, and in use it is found that no displacement or curling-up of the edges will take place, as is common with the ordinary grips which are now in extensive use. The slight depression or groove formed by the adjacent convex edges, together with the natural adhesion of the rubber, prevents the hand from slipping as the club-head impacts with the ball, thus doing away with the tendency of the shaft to turn in the hands when the club is gripped in the proper manner. With the ordinary grip the only way to prevent this turning is to grip very tightly and this is very liable to mar the stroke.

In the actual use of a golf-club, with a grip of the form herein shown, it has been found that no sticky or tacky material is necessary in order to prevent the hand from slipping, even when the shaft is gripped very moderately, and changing weather conditions likewise have no effect upon the grip. Inasmuch as it is waterproof, it does not become slippery when wet, and if wet it can be readily dried, which is not the case with the ordinary leather grip.

In Fig. 7 the grip is shown as applied to a baseball bat, the bat being designated by 14, and the ends of the grip passed into openings 15 and 16, respectively, where they may be secured in any desired manner. It is conceivable that the grip will be found efficient for the steering wheels of motor vehicles and of motor boats. Where the grip is made of the same color of rubber through and through, it will always present the same
appearance, notwithstanding wear, while
affording a better hold than can ordinarily
be had where the handle is covered with
leather, or it is merely painted, and its use
does away with the necessity of painting.
The size of the grip and the yielding or
cushioning effect thereof under the grasp of
the hand may be regulated by the thickness
of the strip or tube employed and the de-
gree of tension applied as the same is wound
in place.

The term "supporting member" as em-
ployed in the appended claims is used as a
generic term, to include both the tubular
sleeve shown in Figs. 1 and 2, and the shaft
or handle, shown in the other figures, and to
which the grip surface is applied and se-
cured.

Having thus described my invention, what
I claim is:

1. A handle or grip, comprising a tubular
sleeve; and a rubber member wound spir-
ally around the same, the edges of said
member being rounded.

2. A handle or grip, comprising a sup-
porting member; and a member composed
of rubber throughout wound spirally around
the same under tension, the edges of said
rubber member being rounded.

3. A handle or grip, comprising a sup-
porting member having a rubber member
susceptible of elongation in the form of
a strip wound spirally about the supporting
member under tension, the ends of the strip
being secured to prevent unwinding of the
same, and the edges of the strip being
rounded so that there are no thin or sharp
portions exposed at the joints between the
adjacent convolutions of the strip.

4. A handle or grip, comprising a sup-
porting member; a rubber tube wound spir-
ally around the same under tension; and
means for securing the ends of the tube in
position upon the supporting member.

5. A handle or grip, comprising a sup-
porting member; a flattened tubular rubber
member wound spirally about the same, the
adjacent convolutions of said flattened mem-
ber contacting; and means for securing the
ends of said tubular member in position

6. A grip or handle, comprising a sup-
porting member; a rubber tube wound spir-
ally around the same under tension, with
the convolutions of the tube in contact; and
means for securing the ends of the tube to
the supporting member; a cap extending
over the outer end of the supporting mem-
ber and the adjacent convolutions of the
tube; and a sleeve overlying the opposite
end of the tubular member and extending
along the supporting member.

7. A grip surface, comprising a strip of
yielding material susceptible of elongation,
having rounded edges, wound in spiral form
under tension about a handle or supporting
member.

8. In a grip, the combination of a sup-
porting member; and a grip surface com-
posed of a strip capable of elongation under
tension, said strip having rounded edges and
being wound spirally about the supporting
member under tension.

9. A grip, comprising a supporting mem-
ber; and a strip of rubber wound spirally
in an elongated condition about said mem-
ber, the adjacent convolutions abutting
below the outer or grip surface proper there-
of, thereby producing a spiral groove or
channel around the grip.

10. In a grip, the combination of a sup-
porting member; a grip surface composed
of a strip of rubber having a plurality of
plies, said strip being susceptible of elonga-
tion and wound about the supporting mem-
ber under tension and presenting rounded
edges.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

ALLAN E. LARD.

Witnesses:

Horace A. Dodge,
John Scrivener.