March 16, 1965 M. D. SERBLIN 3,173,689

GOLF CLUB HANDLE

Filed Feb. 5, 1962

FIG. 1

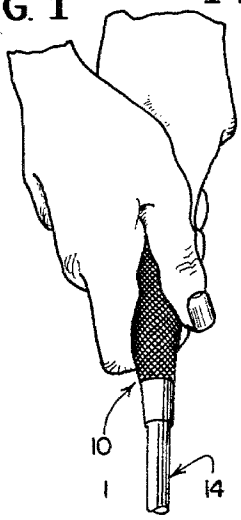


FIG. 2

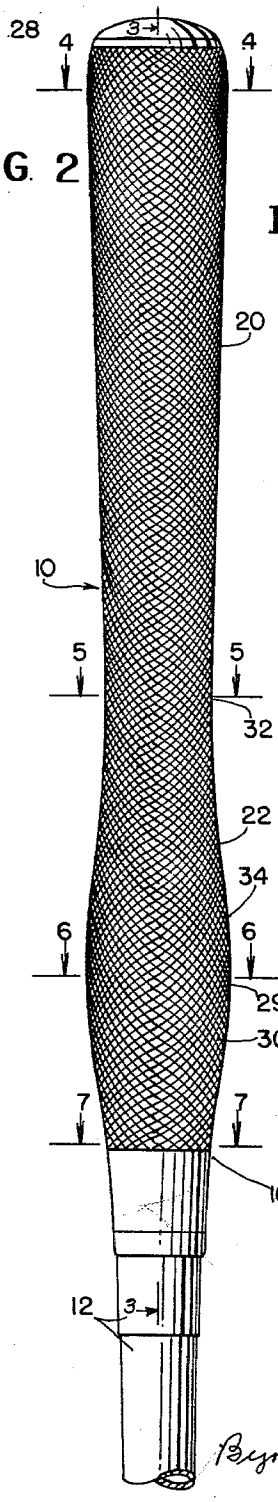


FIG. 3

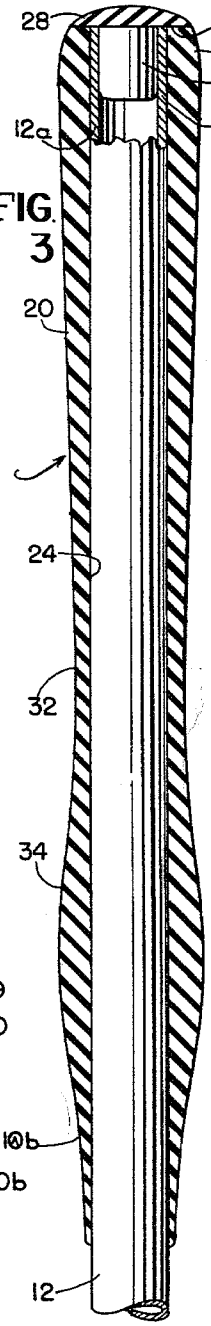


FIG. 4

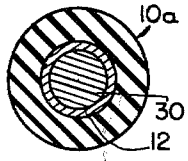


FIG. 5

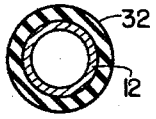


FIG. 6

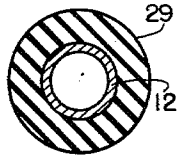


FIG. 7

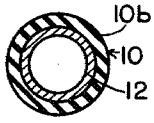
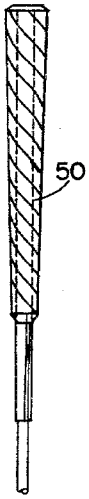


FIG. 8



INVENTOR.
Michael D. Serblin.

BY
Bigrow, Hume, Groen & Clement
Attys.

United States Patent Office 3,173,689 Patented Mar. 16, 1965

3,173,689

GOLF CLUB HANDLE

Michael D. Serblin, 835 N. Ridgeland Ave., Oak Park, Ill.

Filed Feb. 5, 1962, Ser. No. 171,142
1 Claim. (Cl. 273—81)

The present invention relates to golfing equipment and, in particular, to a handle for a golf club.

During the past thirty-five years the sport of golf has enjoyed a phenomenal rise in popularity, the number of players increasing from hundreds of thousands to approximately eighteen million. Golfing equipment during this period has been modified with the objective of improving the performance and score of the golfer. For example, hickory shafts have been replaced with tubular steel shafts which are stronger and substantially more flexible than the hickory shafts. With the steel shafts, a substantially greater velocity is imparted to the club head when the wrists are uncocked during the execution of a golf shot. The heads of golf clubs have been improved by adding new synthetic materials and the like to the basic wooden club head construction. Other items, such as balls, tees, and improved clubs, i.e., sandblaster, chipper, pitching wedge, have all been improved in some way to make it easier for the amateur golfers to master their games.

Hundreds of golf texts have been written by professional golfers to instruct the beginner in the proper execution of a golf shot. Detailed discussions of the grip, stance, backswing, shifting of the body weight, downward swing, uncocking of wrists, follow-through, etc. are customarily included in these texts. Irrespective of individual technique or style, the top professional golfers and/or text writers agree that the hand nearest the club head (the right hand in the case of right-handed players and the left hand in the case of left-handed players) is the "power" hand for the golf stroke. It is the "power" hand that supplies the necessary power to the club so that the club head moves with maximum velocity at the moment of impact with the golf ball.

The professional golfers and/or the text writers are unanimous in their view that the golf club should be held "firmly, but not too tightly." Excessive gripping of the handle interferes with the coordination of the golf swing and causes an overcontrol of the golf club. Under-gripping of the golf club causes undercontrolling of the golf club, with the result that the golf club twists in the hands of the golfer at the moment the club head strikes the golf ball. The conventional inverted, generally truncated conical handle is suitable to the hands of the golf professionals because of long usage, regardless of the thickness or length of the golfer's fingers. The prior art conical handles are awkward for the beginner or amateur to grasp and in many cases complicate his learning process. On the other hand, the conical handles feel extremely comfortable to the golf professionals who have developed a fine golf touch as a result of years of almost daily practice.

It is an object of the present invention to provide a golf club handle that is particularly designed for use by amateur golfers.

It is another object of the present invention to provide a golf club handle that assists the golfer in developing full power at the moment of impact with a golf ball.

It is still another object of the present invention to provide a new and improved golf club handle having a substantially greater hand contacting surface than available with comparable golf clubs, the increased contacting surface acting to distribute the transmitted impact of the club head on the golf ball over a greater area of the hands, with the result that the golf club is more easily held during execution of the golf shot.

It is a further object of the present invention to provide for a golf club a new and improved handle having such a construction that the action of the right hand during a golf shot is appreciably increased, thereby increasing the power delivered to the golf ball.

It is yet a further object of the present invention to provide a new and improved golf club handle having such a construction that the forefinger of the human hand is adapted to grasp the handle in trigger-like fashion.

It is still another object of the present invention to provide a new and improved golf club handle that either may be manufactured as an integral or unitary member or may be built up on a conventional golf club shaft by a wrap-around material or by means of a molded product.

It is yet another object of the present invention to provide for a golf club a new and improved handle which can be economically produced in quantity and may be easily handled, transported and stored.

The invention, both as to its organization and method of operation, taken with further objects and advantages thereof, will best be understood by reference to the following drawing, in which:

FIG. 1 is a perspective view of a golf club handle embodying the features of the present invention, the handle being secured to a fragmentarily illustrated golf club while the hands of a golfer gripping the handle are illustrated in full-line;

FIG. 2 is an enlarged elevational view of the golf club handle of FIG. 1;

FIG. 3 is a sectional view taken along line 3—3 of FIG. 2, shown partially in elevation;

FIG. 4 is a sectional view taken along line 4—4 of FIG. 2;

FIG. 5 is a sectional view taken along line 5—5 of FIG. 2;

FIG. 6 is a sectional view taken along line 6—6 of FIG. 2;

FIG. 7 is a sectional view taken along line 7—7 of FIG. 2;

FIG. 8 is an elevational view of a prior art handle.

The above and other objects are realized in accordance with the present invention by providing for a golf club a new and improved handle that is adapted to be grasped by both hands of a golfer. The handle either comprises a unitary member which is adapted to be fixedly secured to the upper end of the shaft of a golf club or, alternatively, the handle may be built up around the upper end of the shaft by suitable wrap-around material. Irrespective of the form of the handle, it is so constructed that the forefinger of the lower gripping hand of a golfer is adapted to grasp the handle in trigger-like fashion. With this construction, the right hand more firmly grasps the handle and, hence, the golf club, with the result that during execution of a golf shot maximum power is developed by the club and a maximum force is imparted to the golf ball. Moreover, an increased hand contacting surface is provided for the right hand so that any force transmitted to the hands of the golfer as a result of striking the golf ball is distributed over a greater area of the hands of the golfer.

Referring now to the drawings and in particular to FIG. 1 thereof, a handle embodying the features of the present invention is generally identified by reference numeral **10** and is shown suitably secured to a fragmentarily illustrated shaft **12** of a golf club **14**. A suitable club head (not shown) is attached to the lower end of the shaft **12** and, depending upon the type of golf club, the head may comprise either an "iron" head or a "wood" head. As is well known, the shaft **12** is manufactured from tubular metallic material, preferably a steel alloy, and includes a plurality of sections having progressively smaller diameters toward the club head.

In the form of the handle illustrated, the handle **10** comprises an integral member made from suitable rubber or plastic material. It preferably is produced by a molding operation and in order to improve the gripping action of the handle, its external surface may comprise any non-smooth construction, for example, a knurled or a valley and ridge construction. The integral handle member **10** is generally elongated, similar to prior art handles, and includes a longitudinally extending bore **24**, as shown in FIG. 3, for accommodating the tubular metallic shaft **12**.

As is customary, the handle **10** is located at the extreme upper end **12***a* of the golf club shaft **12** by suitable adhesive material such that the upper end **10***a* of the handle **10** is flush with the upper end **12***a* of the shaft **12**, whereby a generally flattened surface is provided for an annular shoulder **26** provided on a T-shaped cap **28**. The cap **28** comprises a shank **30** which is received within the tubular upper end **12***a* of the shaft **12**. To assure that the handle **10**, tubular shaft **12**, and the cap **28** are maintained in assembled relation, an adhesive material is applied to the shoulder **26** and the shank **30** of the cap **28** prior to its nesting with the shaft **12**. In this connection, a suitable adhesive material is applied between the shaft **12** and the bore **24** of the handle **10** prior to mating of these elements.

Similar to prior art handles, the handle **10** embodying the principles of the present invention is gripped by both hands of the golfer in a conventional manner, i.e., for a right-handed golfer, his left hand is positioned closer to the upper end **10***a* of the handle, while his right hand is located immediately beneath his left hand. To this end, the handle **10** includes a first gripping portion **20** comprising generally the upper half of the handle **10** as seen in FIGS. 1, 2, and 3 and a second gripping portion **22** comprising generally the lower half of the handle **10**. Different length handles are provided so that different sized hands will be identically related to the handle construction embodying the features of the present invention.

Considering now the construction of the golf club handle **10** in greater detail and referring specifically to FIGS. 2, 3, 4, and 5, the handle **10** has a generally elongated configuration and is between nine and fifteen inches long. As clearly illustrated, the upper gripping portion **20** converges downwardly and inwardly, while the lower gripping portion **22** first diverges downwardly and outwardly and, then, converges downwardly and inwardly. Actually, the upper gripping portion **20** comprises an inverted substantially truncated cone adapted to be grasped by a first one of the golfer's hands, while the lower gripping portion **22** includes a non-uniformly shaped protrusion or trigger **29** adapted to be grasped by a second one of the golfer's hands. As shown, the two gripping portions **20** and **22** are integrally related to provide a handle surface that is smooth and continuous.

Referring now more specifically to the lower gripping portion **22**, a so-called trigger-grip concept is embodied in this gripping portion. As the name implies, the lower gripping portion **22** is designed so that it is grasped by a golfer's second hand in the same general manner as a trigger on a firearm is grasped. For this purpose, the protrusion, hump or trigger **29** extends outwardly at a point intermediate the middle **32** of the handle and the lower end **10***b* of the handle. As illustrated in FIGS. 2 and 3, the underside **30** of the gripping portion **22** converges downwardly and inwardly and, accordingly, is particularly shaped to be grasped by the forefinger of the second or lower hand of a golfer. With the forefinger of a golfer's hand in this position, the normal tightening of the golfer's fingers causes his hand to snugly grip the protrusion **29** in a manner similar to that by which a trigger is grasped. By this construction, the right hand is more readily able to firmly grasp the golf club handle, with the result that the golfer is more readily able to develop full power at the moment of impact with the golf ball.

In the form of the handle illustrated, the handle construction has a circular cross section, the cross section at the upper end **10***a* of the handle **10** having a maximum diameter (as shown in FIG. 4). In the upper gripping portion **20**, the diameters of the cross sections at points located progressively farther from the upper end **10***a* of the handle **10** are proportionately smaller. At the middle **32** of the handle (or at the juncture of the gripping portions **20** and **22**) the diameter of its cross section is a minimum (see FIG. 5). On the other hand, the diameters of the cross sections between the middle **32** (see FIG. 5) and the protrusion or trigger **29** (see FIG. 6) are progressively greater. As clearly illustrated in FIGS. 2 and 3, the cross sections are not proportionately or uniformly greater but increase in a non-uniform manner. Conversely, between the protrusion or hump **29** and the lower end **10***b* (see FIG. 7) of the handle, the diameters of the cross sections are progressively shorter. It will be appreciated that both the cross sections of the upper end of the handle **10** and the protrusion **29** have maximum diameters, while the cross section of the middle **32** and the lower end **10***b* of the handle **10** have minimum diameters. Finally, the cross sections intermediate the ends **10***a* and **10***b* of the handle have diameters intermediate the maximum and minimum. In any event, in the form of the handle illustrated, both the upper and lower gripping portions **20** and **22** embody smooth and continuous surfaces, such that the handle **10** does not embody any discontinuities. Below the middle **32**, the handle **10** becomes progressively wider until it reaches the protrusion or trigger **29**, after which the handle **10** becomes progressively narrower.

While the upper and lower gripping portions **20** and **22** are illustrated as having particular dimensions, it should be understood that the length of the upper or lower gripping portions **20** or **22** can have different relative dimensions to accommodate large and small hands of golfers. In addition, it should be appreciated that the cross section of the handle need not be circular but may be oval, elliptical, or the like.

Irrespective of the specific dimension or cross sectional shape of a handle embodying the features of the present invention, for the purpose of the following description it is assumed that a right handed golfer grips the handle **10**, as shown in FIG. 1. In this position, the left hand grips the upper gripping portion **20** in a conventional manner, i.e., similar to the manner in which the left hand grips a generally inverted conical prior art handle **50**, illustrated in FIG. 8. However, contrary to the prior art golf club handle **50**, the right hand of the golfer grips the lower gripping portion **22** in a manner different from that by which the right hand grips the prior art handle **50**. More particularly, instead of the forefinger gripping a narrower part of the handle than the 3rd, 4th, or 5th finger—the 4th and 3rd fingers grip the upper side **34** of the protrusion or trigger **29**. Hence, at least the 3rd finger grips a wider part of the handle **10** than do the 4th and little fingers. Moreover, the forefinger of the right hand grips the underside **30** of the protrusion or trigger **29**, which underside **30** has a greater width than the corresponding part of the prior art handle **50**. More specifically, since the underside **30** converges downwardly away from the ridge of the protrusion **29**, the forefinger grips the protrusion **29** much in the same fashion as a trigger on a firearm. Although not clearly illustrated in FIG. 1, the forefinger and middle finger of the golfer's right hand are slightly spaced apart by the ridge of the protrusion **29**.

In contrast to the prior art handle illustrated in FIG. 8, it will be appreciated that incident to gripping of the club by the golfer's right hand, the fingers securely grip the lower gripping portion of the handle **10**. Because of the normal clenching action of the hands, the forefinger of the golfer's right hand securely encircles the protrusion **29**, thereby to impart to the golfer's right

hand greater control over the golf swing and, further, thereby to assist the golfer in developing full power at the moment of impact with the golf ball. In further contrast to the prior art handle illustrated in FIG. 8, it will be appreciated that an increased hand contacting area is provided for the golfer's right hand. Inasmuch as a larger portion of the palm and fingers of the golfer's right hand engages the handle, any force developed by impact of the club head on the golf ball and transmitted through the shaft 12 to the handle 10 is distributed over a larger area, with the result that the golfer is more easily able to retain and grip the golf club 14. It is well known that when the golf ball is hit with the center or toe of the club head, a moment is developed about the shaft 12 of the golf club 14. Consequently, a torque or twisting force is created which tends to twist or rotate the handle 10 in the hands of the golfer. Inasmuch as a greater hand contacting area is available with the handle 10, the unit force transmitted to the hands is substantially reduced. For example, if a hundred pounds of force are applied to ten square inches, a unit force of ten pounds per square inch is obtained, whereas if a hundred pounds force were applied to twenty square inches, only a unit force of five pounds per square inch would be obtained. Hence, it will be appreciated that the golfer is more easily able to prevent the twisting of the club 14 when grasping the handle 10 than when grasping the prior art handle 34.

Although the above discussion relates to a unitary handle member, it should be apparent that the same general configuration, described in detail above, can be obtained by building up a handle on the upper end of a shaft by the use of suitable wrap-around materials. By using a strip of wrap-around material having a variable depth, the trigger grip configuration can be produced by wrapping the strip material only once around the shaft and will produce a handle which will be as satisfactory as the above-described unitary handle member 10. Alternatively, a strip material having a constant depth could be wrapped around a shim-like member suitably secured to the shaft.

In accordance with yet another modified form of the present invention, the handle—instead of having longitudinally straight edges—may have generally curved edges forming either a pair of slightly concave or slightly convex edges.

Furthermore, it should be appreciated that it is within the purview of the present invention to modify existing prior art, inverted conical handles to produce the handle construction illustrated and described in detail above. More particularly, after the prior art handle is removed from the shaft, a handle adapter member having a construction identical to the lower gripping portion 22 is suitably secured to the lower portion of the prior art handle. Alternatively, the prior art handle can be modified without removing it from the shaft by building up a lower gripping portion with a suitable wrap-around material.

While the embodiments described herein are at present considered to be preferred, it is understood that various modifications and improvements may be made therein, and it is intended to cover in the appended claim all such modifications and improvements as fall within the true spirit and scope of the invention.

What is desired to be claimed and secured by Letters Patent of the United States is:

A trigger grip type golf club handle secured to one end of a shaft of a golf club that has a golf club head secured to the other end thereof; which trigger grip type golf club handle comprises a unitary elongated member located on the end of the shaft remote from the club head, said unitary elongated member having a first hand gripping segment that constitutes the major portion of said member, said first hand gripping segment surrounding the entire peripheral surface of the end of the shaft remote from said club head and being defined by a continuous handle portion of circular cross section that is convergingly tapered from the end of said handle in the direction of said club head, and a second hand gripping segment that is integrally merged with said first hand gripping segment to define a continuous handle surface, said second hand gripping segment being defined by a continuous handle portion of circular cross section that is divergingly tapered and then convergingly tapered in the direction of said club head so as to form a single continuous and uninterrupted annular protrusion of gradually increasing and then decreasing circular cross section around the entire peripheral surface of the remaining portion of said elongated member and transverse to the longitudinal axis of said member, said annular protrusion being formed at a location on said member so that the thumb and forefinger of the lower hand of a golfer encircle at least a portion of said protrusion in trigger grip fashion when properly gripping the handle.

References Cited by the Examiner

UNITED STATES PATENTS

259,448	6/82	Woodhouse	273—75
748,000	12/03	Murnane	273—72
1,038,429	9/12	Penny	273—67
1,213,014	1/17	Rees	273—81
1,305,952	6/19	Suesman	273—81
1,530,596	3/25	Dye	273—165
1,638,454	8/27	Papin	273—81.4
2,131,966	10/38	Nelson	273—81
2,155,517	4/39	Turner	273—81
2,710,190	6/55	Schimansky	273—165
3,036,836	5/62	Mason	273—165

DELBERT B. LOWE, *Primary Examiner.*

EVON C. BLUNK, *Examiner.*