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Brucker

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[54] **GOLF-CLUB SELECTION AID**

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[52] **U.S. Cl.** ..... **33/277,** 33/263, 116/114 R, 273/162 R, 273/183 A, 273/194 R

[51] **Int. Cl.** **G01c 3/00**

[58] **Field of Search** ..... 33/263, 277; 273/162 R, 273/183 A, 194 R; 116/114 R

[56] **References Cited**

UNITED STATES PATENTS

609,256	8/1898	Wyllie	33/277
2,519,727	8/1950	Yezdan	33/277
3,409,987	11/1968	New	33/277

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[57] **ABSTRACT**

A mathematically proportioned sequentially related, color-identified set of markers for use in training as integral parts of respective golf clubs of a set and adapted to indicate correct club selection; the golfer makes a "one-time" calibration with regard to his own characteristics and to characteristic flagstick height on the course played to determine which color he should use of a sequence displayed on each device of the set, and after that selects all his clubs with reference to that single color.

7 Claims, 6 Drawing Figures

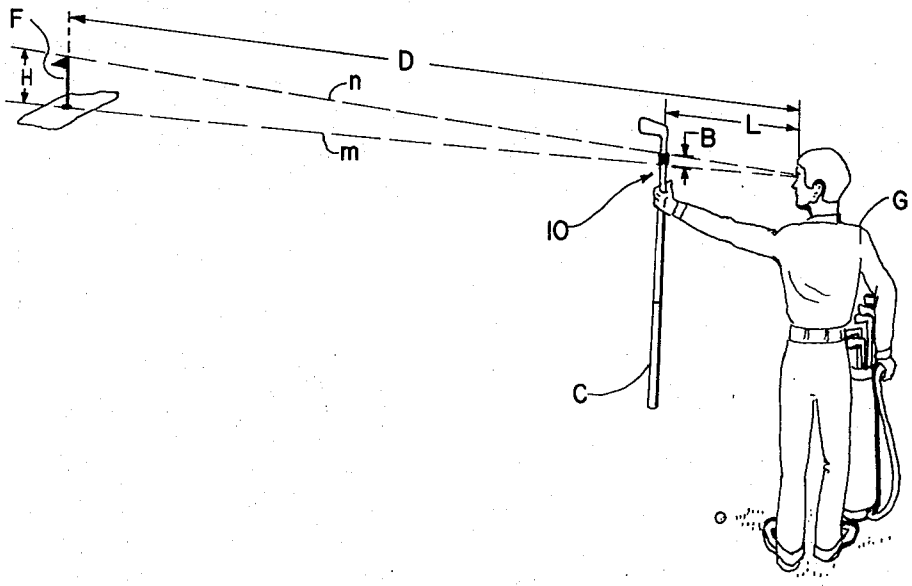
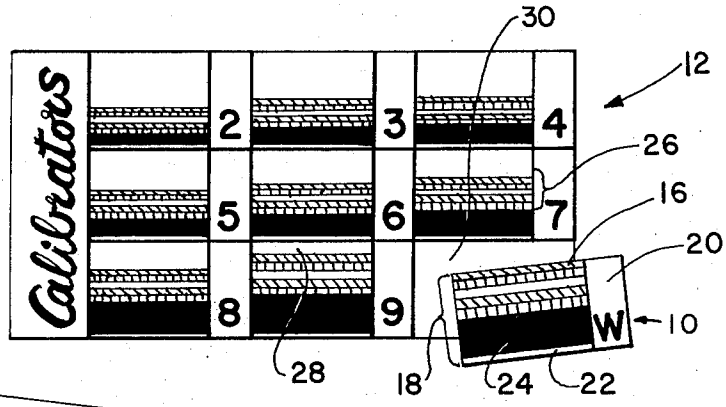


FIG. 1



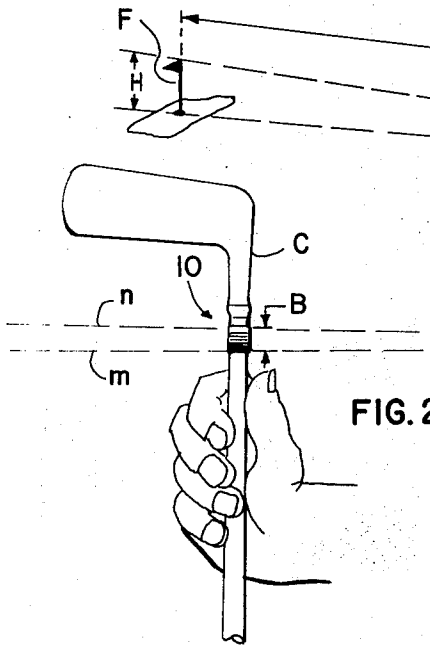


FIG. 2

FIG. 3

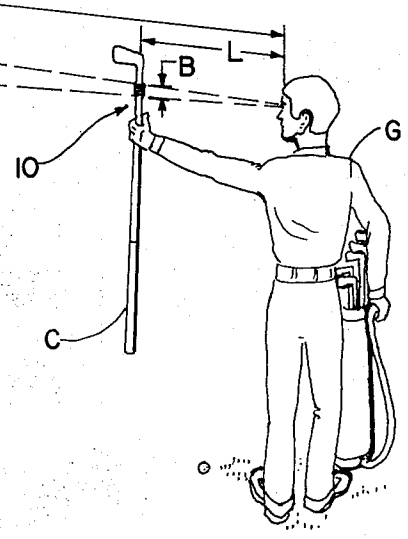


FIG. 4

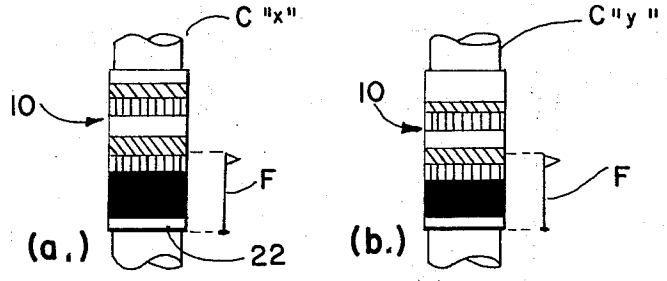
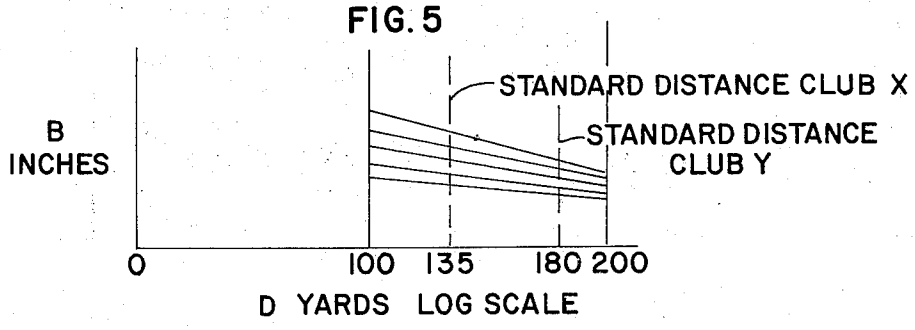


FIG. 5



GOLF-CLUB SELECTION AID

This invention relates generally to calibrating devices and specifically to golf club selection devices.

Much of the satisfaction in golf lies in selection of the optimum club. Increased confidence in club selection leads to consistency of swing with consequent reduction in error and resultant lowering in score.

Among the commonest misdirected efforts of golfers on the fairway is the application of "body English" during the stroke in a deliberate attempt to modify the distance the ball will travel from that obtainable with a proper or grooved swing. This so-called pressing on the part of the golfer is usually in response to his or her natural desire to apply experience learned elsewhere (as in croquet or badminton) to the problem of fairway ranging in golf, and the result is usually detrimental to the score.

In contrast with other sports, proper ranging on the golf fairway depends largely on proper club selection rather than in degree of force applied. For example, the average golfer properly uses the four iron in the 150 to 160 yard range, the five iron in the 140 to 150 yard range, the six iron in the 130 to 140 yard range, and so forth.

If the golfer has been properly taught, he swings consistently and uniformly, varying the distance by proper club selection. Confident, proper club selection inevitably yields results that encourage him to stay within the swing he has been taught. Repeated use of that swing improves his game with time, bringing fewer errors and consistently lower scores.

However the key phrase is confident, proper club selection. Without confidence the golfer's tendency to force his shot cannot be controlled, even in the case of professionals.

The principal object of the present invention therefore, is to improve the golfer's ability to swing consistently and uniformly by freeing him from the stresses imposed by uncertainty in club selection.

Another important object is to provide a "single color" training system enabling golfers to play by reference to a single color using any club, after an initial calibration, promoting continuity of effort and enjoyment in the game.

A further object is to afford increased enjoyment in playing strange golf courses when caddies are not available by increasing club selection objectivity through use of the training device of this invention, allowing the golfer to play his normal game without assistance.

In typical embodiment the invention comprises a calibrator adapted for carrying as a part of a discrete club and having marks proportioned for coincidence with lines of sight to the base and tip of a flag when held at arms-length and sighted past by a golfer who is within the distance to the flag peculiar to the club in the light of his own characteristics when using the club.

The above and other objects and advantages of the invention will become more apparent on examination of the following description, including the drawings in which:

FIG. **1** is a plan view of an embodiment of the invention;

FIG. **2** shows the invention in place on a golf club;

FIG. **3** is a perspective detail of the invention in use by a golfer on a golf course;

FIG. **4** at (*a*) and (*b*) shows two perspective details of the invention in use; and

FIG. **5** is a plot.

In the Figures, like numerals denote like parts.

FIG. **1** shows a self-adhesive array **12** on release paper **30** of nine separate calibrators **10** marked "**2**" through "**9**" and "W," corresponding to the ordinary designations of discrete golf clubs with which they are intended for use. The calibrator W at the lower right is shown lifted from the release paper preparatory to installation by wrapping around the shank of a golf club.

Each calibrator **10** comprises a rectangular strip having the designating numeral or letter **14,** and a series of specially spaced parallel lines or bands **16** forming a scale **18** extending across the face of the strip. The designating numeral or letter is preferably at one end of the strip in a contrasting panel **20** perpendicular to the parallel lines, as shown, to facilitate wrapping without misregistration at the overlap, which could affect accuracy and confuse the user. The strip may be of plastic, coated paper, or other suitable material. Preferably the individual calibrators have adhesive backings and are detachably mounted for storage and display in sequence on release paper **30.**

The parallel bands are preferably of contrasting colors, and comprise generally a fiducial or base line **22,** preferably white and the same for all clubs, a spacer region **24,** preferably black, and finely graduated region **26.** The sequence of color lines is repeated in the scale for each club. The black spacer and the bands of the finely graduated region are narrowest for the lowest numbered club, in the illustration the two-iron, and are proportionally wider for succeeding clubs, W the wedge calibrator having the widest black spacer and bands of all.

Preferably all calibrators are, as shown, the same width, with a white spacer **28** making up the extra width needed; the white spacer correspondingly diminishes as the black spacer and band increase in the successive calibrators and is completely displaced in the W calibrator.

In use, the preferred embodiment having black at the bottom, white at the top, and the finer bands or graduations set off by color in between, comprise a natural and psychologically comfortable training instrument, simulating in a sense the light of the sky and the dark of the ground accentuating between them the area of discrimination.

FIGS. **2, 3** and **4** are described together.

FIG. **2** shows a calibrator **10** in place on a golf club.

The grip shown is satisfactory, and the club is preferably held extended to the golfer's side as in match pistol shooting.

FIG. **3** diagrams the use of the invention. For the initial, one-time calibration of this course in terms of the flagstick height, and of himself and his clubs, the golfer G selects a club C (say club "X", FIG. **4***a*) which he thinks is appropriate for him to use at the distance D to the flag F. He holds the club at arms-length L and sights *m* past the fiducial mark or base-line **22** of the calibrator to the base of the flagstick. Holding this position, he then sights *n* past the scale **18** of the calibrator to the top of the flagstick, noting which color band on the calibrator corresponds with the top of the flagstick. After this, using the club, he hits in his normal manner

one or more balls toward the green. If his shots come to rest on or alongside the green he has, using the one club, calibrated the entire set of parameters mentioned, including all his clubs. From then on, to select the optimum club, he has simply to pick a club which seems appropriate for his use at the particular distance, and sight across the calibrator and determine whether "his" color band coincides with the top of the flagstick when the fiducial mark or base line is at the base of the flagstick. If it does, he makes his shot, assured. If it does not, he sights using the next higher or next lower club (for example club "Y," FIG. 4b) and uses the club having the calibrator which satisfies the condition.

It is essential to note that this invention makes a smooth, satisfying continuity of proper club selection. Arithmetic is eliminated, and the club found proper is in-hand, ready for address and swing. The "one-time" calibration is easy and simple to understand and need be repeated only when one of the parameters changes, as in playing another course which has a different flagstick height. Each then, simply by moving up or down a single color band in his sighting, can usually accommodate for change in characteristic flagstick height when he changes courses.

The geometrical basis for the invention is as follows:

B = base-line-to-proper-color-band distance on the calibrator;
H = flagstick height;
L = armlength;
D = distance to flag

$$B = H \times L/D$$

FIG. 5 represents a logarithmic plot of maximum and minimum combinations of arm lengths and flag heights normally found. To accommodate differences in individual characteristics such as arm-length and hitting ability, in the heights of different sets of flags, and in other systematic variations, while insuring legibility and simplicity, the successive spacings from the fiducial mark are set at one-club increments in normal distance.

Therefore, the golfer will find that his variations from an average golfer on a course with average flagstick heights are:

1. If the flags are taller, up a band;
2. If he hits longer, down a band;
3. If he hits shorter, up a band;
4. If he has longer arms, up a band;
5. If he has shorter arms, down a band, etc.

However, it is to be noted that his "one-time" calibration for a given course encompasses all these variations, and he does not have to think about them.

The invention has been described as a separate strip to be applied to golf club shanks. It can also be fashioned integral with any part of training clubs if desired, as by scoring and painting, in which case numeral and letter designations are superfluous. The lines or bands can be of other shapes, such as squares or circles, and the fiducial mark can be a structure of the club itself.

Obviously, many modifications and variations of the present invention are possible in light of the above teachings. It is, therefore, to be understood that within the scope of the appended claims the invention may be practiced otherwise than as specifically described.

What is claimed and desired to be secured by U.S. Letters Patent is:

1. A club selection device for golfers' use in conjunction with a set of discrete golf-clubs comprising: a set of discrete calibrators, each discrete calibrator adapted for carrying as a part of a respective discrete club; each said discrete calibrator including a series of marks, each said discrete calibrator having a fiducial mark with the marks of said series being spaced from the fiducial mark predetermined amounts proportioned in one-club normal distance increments for coincidence with lines of sight to the base and tip of a said flag when held at arms length and sighted past by a golfer who is, in terms of his own capacity using said discrete club within the distance to a said flag peculiar to said discrete club carrying the discrete calibrator, and the distance in spacing between successive of the discrete calibrators in the set thereof increasing in one-club normal distance increments.

2. A club selection device as recited in claim **1**, wherein the series of marks comprises lines, wherein plural of said lines are made distinct by a color sequence, and wherein the color sequence is repeated in each discrete calibrator of the set, thereby adapting the club selection device to indicate by single color-band reference correct club selection from a said set of golf clubs taking into account golfer arm length and hitting ability and golf course characteristic flagstick height.

3. A club selection device as recited in claim **2**, wherein each calibrator comprises a strip of material having an adhesive backing and wherein the set of calibrators includes a release paper mounting with the calibrators mounted in sequence thereon.

4. A club selection device as recited in claim **2**, wherein the lines are substantially parallel, with at least one of said lines being of a length adapted to extend around a substantial portion of a golf shaft.

5. A club selection device as recited in claim **4**, wherein the discrete calibrator comprises a band-like portion of material-adapted for mounting on a portion of the shaft of a said discrete club with the series of lines perpendicular to said shaft, and wherein a designator is provided for correspondence with the discrete designation of a said discrete club on which the discrete calibrator is adapted for mounting.

6. A club selection device as recited in claim **5**, wherein the discrete calibrator is a strip of material adapted for wraparound mounting and wherein the designator is positioned along one end of the strip of material, thereby preventing mis-registration at the wraparound overlap.

7. A club selection device as recited in claim **6**, wherein the strip of material has an adhesive backing.

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