

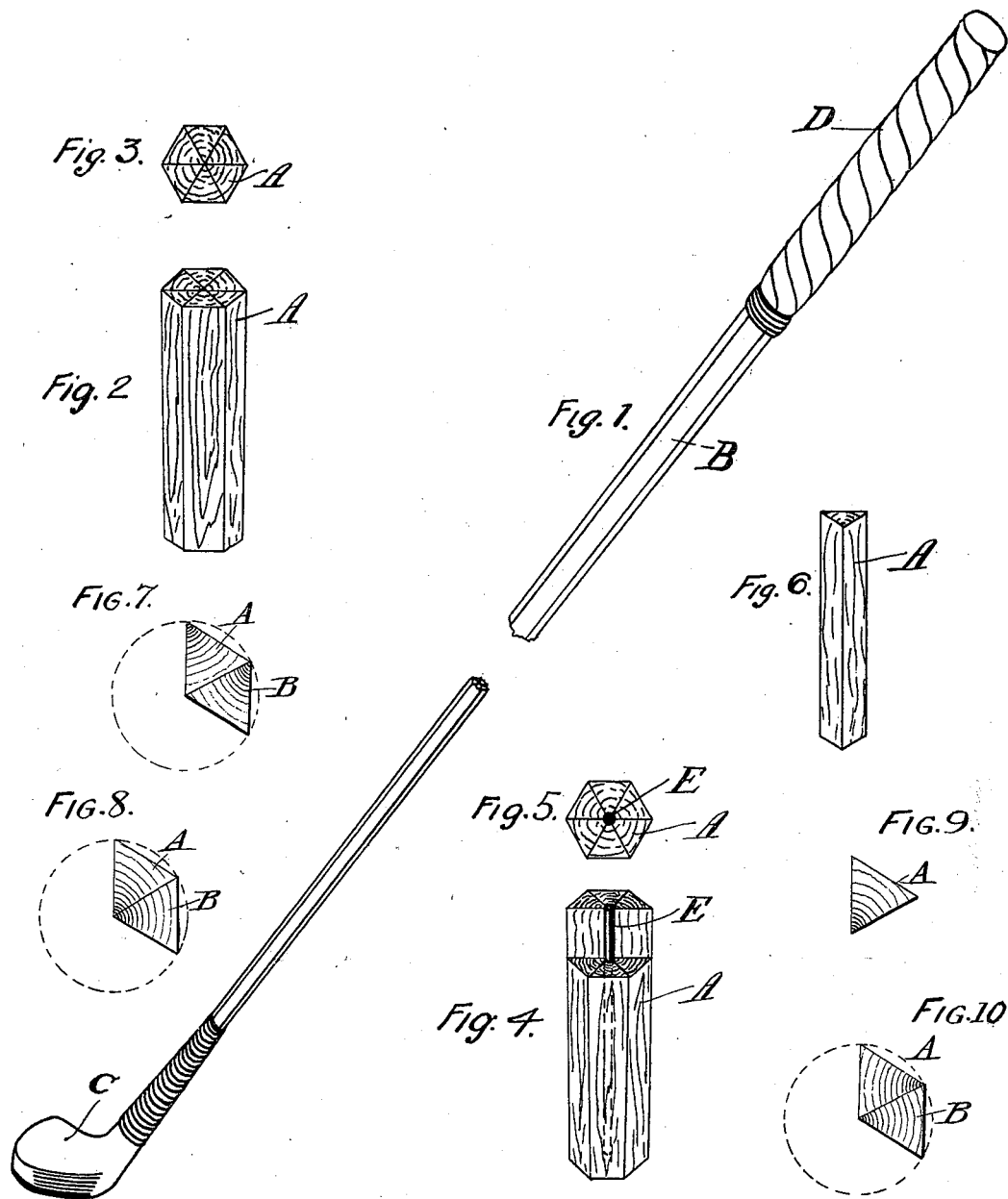
No. 649,146.

Patented May 8, 1900.

R. O. TICE.
GOLF STICK.

(Application filed Dec. 13, 1899.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

ROBERT O. TICE, OF ALBANY, NEW YORK.

GOLF-STICK.

SPECIFICATION forming part of Letters Patent No. 649,146, dated May 8, 1900.

Application filed December 13, 1899. Serial No. 740,228. (No model.)

To all whom it may concern:

Be it known that I, ROBERT O. TICE, a citizen of the United States of America, and a resident of the city of Albany, county of Albany, State of New York, have invented certain new and useful Improvements in Golf-Sticks, of which the following is a specification.

My invention relates to golf-sticks; and the object of my invention is to provide a golf-stick composed of a series of sectional parts of wood united together in such a manner that the grain of the adjacent strips may be so disposed in reference to each other as to allow for a golf-stick to be varied in reference to its pliability or stiffness as desired. I attain this object by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an elevation with parts broken away. Fig. 2 is an elevation of a portion of the golf-stick. Fig. 3 is a cross-section. Fig. 4 is an elevation of a modified form of my stick with parts broken away. Fig. 5 is a transverse section of the modified form. Fig. 6 is a detailed view of the sectional strips A. Fig. 7 is a detailed view showing two of the strips with their toughest portion at the outside. Fig. 8 is a detailed view showing two of the strips placed with the toughest portion at the center of the stick. Fig. 9 is a plan view of one of the strips. Fig. 10 is a detailed view of two of the strips, one having its toughest portion at the center and the other at the outside.

Similar letters refer to similar parts throughout the several views.

It is a well-known fact that fishing-rods have been constructed of split bamboo, the split portions being united and forming a very useful and beautifully-finished rod. When it is desirable to obtain one rod stronger than another, it is necessary to get a heavier rod, because the strength of the wood lies near the surface and the outside of the bamboo must form the outside of the fishing-rod.

I have invented a means for constructing a golf-stick out of strips of wood split not unlike the strips used in a bamboo fishing-rod, with these exceptions: First, the wood used is preferably white ash, and, second, instead of placing the strips together so that the portion of the

strips which is nearest the outside of the tree, and which is of necessity the toughest, shall be the outside of the golf-stick, I combine strips in such a manner that the grain of the strips adjacent to each other may be changed, so as to render the stick more or less pliable, depending upon the position of the adjacent strips in reference to their grain. A stick thus constructed of strips will not "sting" the hand when used or become bent and out of shape as an ordinary stick sometimes will. I can make a golf-stick of a given weight and make it very stiff, or by differently arranging the strips in reference to each other I can make the same stick more pliable, and in this way without adding to the weight of the stick I can increase its stiffness or pliability. That this is an important element of the invention is apparent, since a stick of very light weight may thus be made as stiff and strong as a much heavier stick could be constructed in the usual method of constructing the same.

Referring to the drawings, A B represent the triangular-shaped strips of ash sawed and planed in such a manner that they will fit together and form a composite stick B. These strips are fastened together by glue or by any suitable means and the head C and the handle D secured to the stick in any desired manner.

In Figs. 5 and 6 is shown a modified form of my invention which is the same as that already described, with the exception that I arrange through the center of the stick an opening through which I may place a metallic rod E for the purpose of adding to the rigidity of the stick.

In the drawings it is supposed that the strips A and B are the hardest and toughest at that portion of the strips having the shorter shade lines. Thus in Figs. 2, 3, 4, and 5 the hardest portions of each strip are in each case placed at the center of the composite stick. In Fig. 8 the hardest portions of the strips A and B are also at the center, and thus make a stick of the maximum pliability. In Fig. 7 the hardest portions of the strips A and B are arranged at the exterior of the stick, by which arrangement the greatest rigidity would be obtained. In Fig. 10 the hardest portion of the strip A is at the exterior and the hardest portion of the strip B at the in-

terior, by which arrangement a composite stick is formed in which the pliability and rigidity would be between that shown in Figs. 7 and 8.

5 What I claim as my invention, and desire to secure by Letters Patent, is—

1. A series of triangular strips of wood, each strip being cut in such a manner that it is harder at one angle than at the others: the
10 strips placed side by side forming a composite stick, whose rigidity depends upon the position of the strips with reference to their hardest portions being placed either at the exterior or the interior thereof, substantially as
15 described.

2. In a golf-stick, a series of equilateral, triangular strips each strip being cut in such a manner that it is harder at one angle than

at the others, and adapted to be placed together and secured in position in such a manner that the pliability of the stick may be increased or diminished, depending upon the position of the strips in reference to each other, substantially as described. 20

3. In a golf-stick, a series of triangular
25 strips arranged and secured together in such a manner as to form a hexagonal stick, with a metallic rod passing through the center thereof, substantially as described.

Signed by me at Albany, New York, this
30 7th day of December, 1899.

ROBERT O. TICE.

Witnesses:

FREDERICK W. CAMERON,
MARY E. PARLATT.