

Dec. 3, 1968

H. H. CHASE
GOLF TEE WITH SEAT FORMED BY COACTING CENTRAL
PART AND RADIATING PETALS

3,414,268

Filed Sept. 24, 1965

2 Sheets-Sheet 1

FIG. 1.

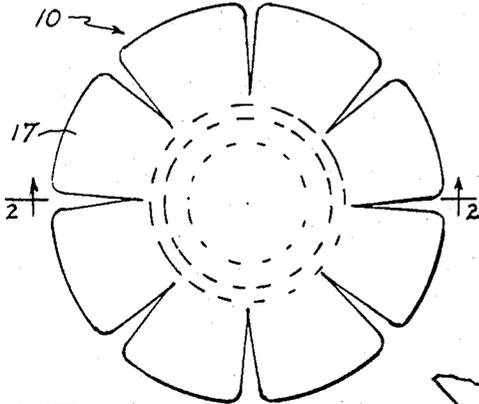


FIG. 2.

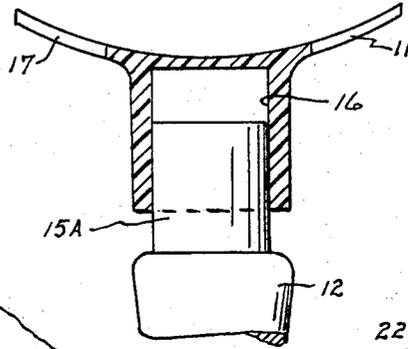


FIG. 3.

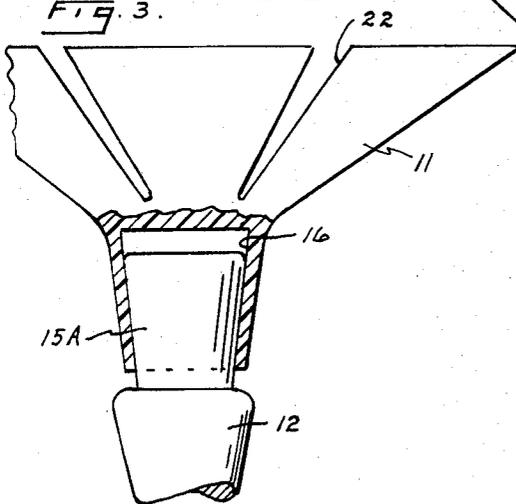


FIG. 5.

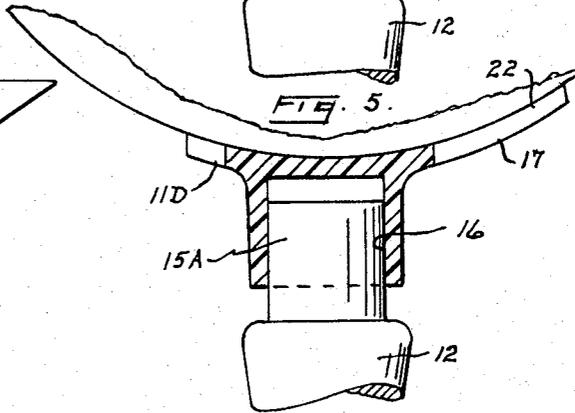


FIG. 4.

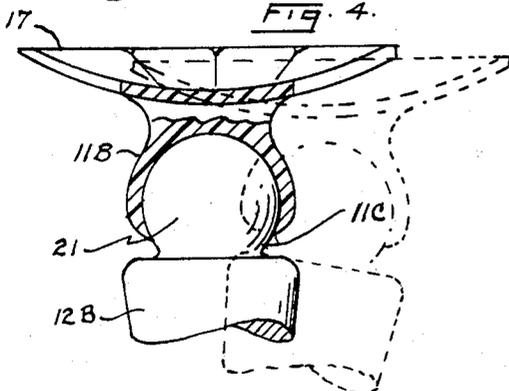
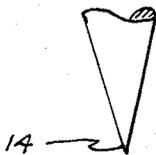
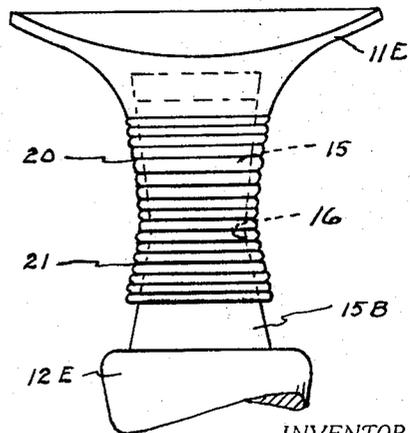


FIG. 6.



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Fig. 7.

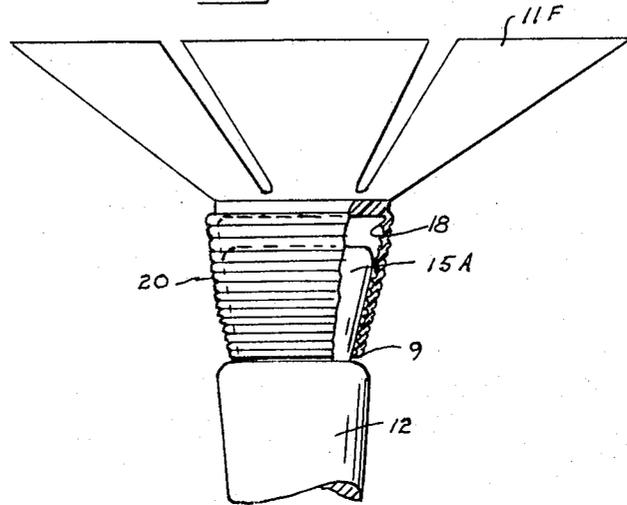
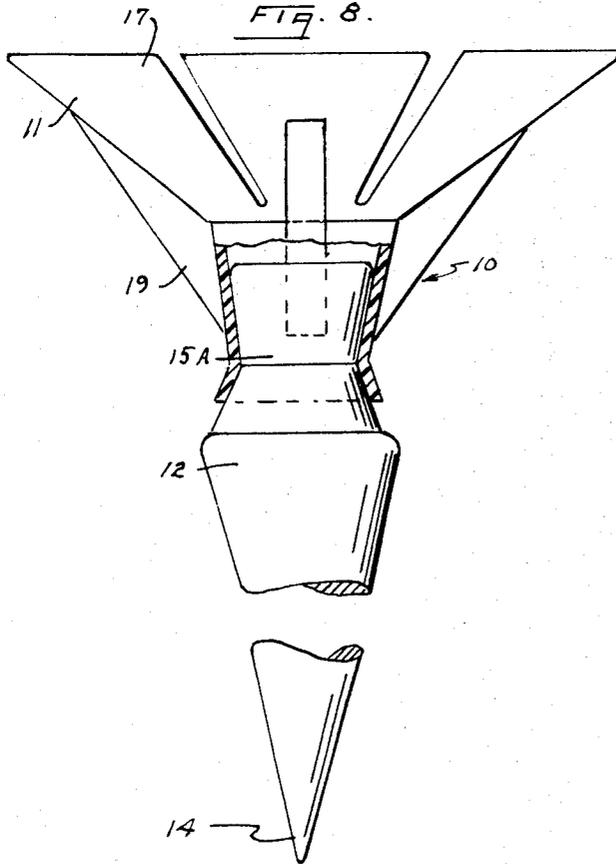


Fig. 8.



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**GOLF TEE WITH SEAT FORMED BY COACTING
CENTRAL PART AND RADIATING PETALS**
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ABSTRACT OF THE DISCLOSURE

The ball supporting portion of the tee is made of flexible material and comprises a central disk part integral with an attaching portion for connecting such ball supporting portion to a shaft, and a plurality of separate petals radiating outwardly from the disk part so that their upper surfaces throughout their areas form a conically-shaped annular seat for the ball.

This invention relates to golf tees and more particularly to a golf tee in which the top of the tee is flexible and removable and expendible and remountable or replaceable for further use and in which the top is formed to the configuration of the ball and the shaft is extended for insertion in the ground.

The prior art illustrates various golf tees of different configurations. The most universally used tee is a solid wooden tee with a cup shaped top as the engaging surface for the ball. This tee is easily broken and due to its solid engaging surface will tend to alter or affect the flight of the ball on certain types of hits, for example, when the golf club bears downward on the ball to cause the ball to become distorted by the extreme compression or downward thrust at the time of club impact. Other types of tees are the spring or flexible type generally of metal. These may damage the face of the golf club and are easily lost after each drive. A further type of tee is the rigid shaft with a rubber cup shaped top. This type of tee is easily driven with the ball and is expendible with each shot. A still further type of tee is the group of elongated fibers tied in the middle and cupped at the top to provide a flexible tee as shown in Patent No. 1,781,757 and a still further type of golf tee is a cone shaped rigid element having a hollowed out upper portion with the cupped tee element resiliently mounted in the hollowed portion as shown by Patent No. 2,011,203.

It is an object of this invention to provide a golf tee provided with an independent flexible top that conforms to the engaging surface of the ball and in which the supporting flexible top is so flexible that it will not alter any loft imparted to the ball by the angle of the club face.

A further object of this invention is to provide a golf tee having an independent easily mounted flexible top that conforms to the engaging surface of the ball and in which the flexible top due to the elastic and/or flexible tubular collar will absorb the distortion of the golf ball without being chipped or broken.

A still further object of this invention is to provide a golf tee having an independent easily mounted flexible top of such a configuration that the top and its mounting will absorb the compression caused by the distortion of the ball resulting from the blow of the golf club and its distance of roll or travel will be limited due to the resistance imparted by its configuration and the light weight of the tee.

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Other objects of this invention will be apparent by reference to the accompanying detailed description and the drawings in which

FIG. 1 is a plan view of the golf tee,

FIG. 2 is a side elevational view partly in cross section of FIG. 1 taken on line 2-2,

FIG. 3 is a side elevational view partly in cross section of a further embodiment of this invention,

FIG. 3 is a side elevational view partly in cross section of a further embodiment of this invention,

FIG. 4 is a side elevational view partly in cross section of a further embodiment of this invention,

FIG. 5 illustrate a side elevational view partly in cross section of a still further embodiment of this invention,

FIG. 6 illustrates a side elevational view partly in cross section of a still further embodiment of this invention,

FIG. 7 illustrates a side elevational view partly in cross section of a still further embodiment of this invention, and

FIG. 8 illustrates a side elevational view partly in cross section of a still further embodiment of this invention.

Referring to the drawings and particularly FIGS. 1 and 2 there is illustrated a two piece golf tee 10 comprised of a top 11 and shaft 12. The shaft 12 may be circular or any desired configuration provided with a point 14 at one end for insertion in the ground. The opposite end 15 is formed with a tenon 15A to fit within a bore 16 which is a part of element 11. Extending radially from cup 16 are a plurality of petal shaped elements 17. Elements 17 are flexible being easily deformed or pushed downward when the golf ball leaves the tee. Petals 17 are formed to fit the general configuration of a golf ball thus forming a cup shape for the golf ball to be inserted into. It is apparent in this embodiment that element 11 may be pressed onto tenon 15A to provide a normal golf tee. Element 11 fits snugly about tenon 15A thus entrapping air above tenon 15A so that there is a certain degree of resilience between tenon 15A and element 11 in a vertical relationship. The golf ball illustrated in FIG. 5 is placed on the cup shaped area supported by petals 17. In use when the club face hits the golf ball there may be any of a variety of conditions produced. If the golf club comes down upon the ball and the ball is driven downward the flexible petals 17 will allow the ball to pass in the angle at which it is hit. Element 11 will be forced downward on tenon 15A by the distortion of the golf ball and due to the built in resiliency there will not be any damage to element 11. Likewise if the ball is hit solidly and there is considerable distortion of the golf ball, petals 17 are so flexible that they will offer little or no resistance to the ball leaving the cup shaped formation. Likewise if the golf club hits the ball from below center, the golf ball will leave the tee without any effect and the golf tee will be driven with the ball but due to its configuration and lightness it offers considerable resistance and cannot roll or fly a great distance. Due to being a two piece tee this type of hit or even a direct hit will tend to tear off element 11 leaving shaft 12 in the ground without breaking shaft 12. Element 11 may be recovered or a new element 11 may be used with the unbroken shaft 12 or with another shaft 12 for the next shot. Further with this tee the flexible cup shaped element 11 will absorb the distortion of the golf ball caused by the blow of the golf club without being broken or damaged and it is thus reusable with any shaft 12.

Referring to FIG. 3 there is illustrated a further em-

bodiment of this invention similar to the tee of FIGS. 1 and 2 except that tenon 15A is tapered and the bore 16 is similarly tapered to fit tenon 15A thus although the entrapped air above tenon 15A provides resiliency to the ball distortion, it also provides the rebound or reflex of element 11 to its initial position so that it is ready for the next drive. The taper of tenon 15A retards upward movement of element 11 as well as the driving of element 11 off shaft 12.

Referring to FIG. 4 there is illustrated a still further embodiment of this invention in which element 11B is formed with a spherical cup with an open end 11C while the main shaft 12B is provided with a ball shaped end or tenon 21 to permit the spherical cup to be pressed onto the ball shaped end 21 in use. The general configuration of element 11B is similar to that illustrated in FIG. 1. It is to be noted that the spherical cup may be rotated about the ball shaped end to position the petals 17 in other than a horizontal position for retaining the ball, that is, slightly tilted forward, backward or to either side as desired. This also permits shaft or shank 12B to be inserted in a slightly angular relation as illustrated in dotted lines in FIG. 4 while the ball retaining portion 11B is positioned in the desired horizontal position.

Referring to FIG. 5 there is illustrated a tee having a shaft 12 and a flexible disc shaped top 11D. The disc shaped top 11D is slit with a plurality of slits 22 (FIGS. 3 and 5). The disc top 11D is elliptical shaped and with the shorter portion of the disc the front end for driving, this provides a perfect balance for the golf ball when inserted thereon.

Referring to FIG. 6 there is illustrated a further embodiment of this invention in which element 11E and the tenon end 16 of the shaft or shank 12E are modified, that is, the tenon 15 in its lower half is cone shaped as shown at 15B while the portion 11E is provided with an accordion walled tubular shaped element 20 affixed to the bottom of element 11E. This tubular element 20 provided of a size to fit about the tenon 15 with the lower end of the accordion shaped tube 20 slightly expanded as shown at 21. Thus with element 11E mounted on tenon 15 and 15B of shaft 12E, it is apparent that there will be a great deal of flexibility between the shaft and the ball retainer 11E. Any compressive force produced upon 11E will be taken up by the tube 20 and at most force portion 21 further down upon the cone shaped area 15B. The reflex of tube 20 will be to slide up the cone shaped area 15B and restore 11E to its initial position as illustrated.

FIG. 7 is a still further embodiment of this invention in which a shaft 12 is provided with a tenon 15A at the upper end similarly tapered as shown in FIG. 3. In this embodiment the element 11F similar to element 11 of FIG. 3 is provided. However the lower end of element 11F is constructed with an accordion shaped tube 20 as shown in FIG. 6. As shown in FIG. 7, the interior of the tube has ridges 18 which engage the tenon 15A. Thus tube 20 will grip the smallest diameter of tenon 15A and will be expanded about the greater diameter and provide considerable flexibility in its movement due to the direct force of ball distortion or indirect force acting upon the tee when the ball is driven from the tee.

Referring to FIG. 8 there is illustrated a still further embodiment of this invention in which element 11 of FIG. 3 is utilized. However to provide additional rigidity to the petals 17, a reinforcing rib 19 is provided for each petal 17 thus in this form the petal 17 will have more rigidity and greater support for the golf ball and in this particular form the absorption of the downward thrust from the ball simply drives the portion 11 downward on tenon 15A. Element 11 will in each driving reaction reflex or return to its initial position.

It is to be noted that element 11, 11B, 11D, 11E and 11F may be used without shaft 12 as a flat tee resting directly on the ground as desired.

Although the golf tee has been illustrated in the general configuration of a flower with petals 17 formed in radial formation, the petals 17 do not have to follow the exact configuration of a petal. They may be replaced by a circular disc shaped cup provided with a plurality of radial slits to provide a plurality of separated supporting portions to react in a similar fashion to the petals 17 of the preferred embodiment. The general construction of the tee may be of a flexible material for the top element 11 and a rigid material for the shaft 12. In the embodiment providing a disc shaped top, the top may be attached to shaft 12C in any fashion and be an expendable top. The plastic top may be molded onto a wood shaft and thus the top tends to grip the shaft better and is not as easily separated. Various changes may be made to the top element in its general configuration, in the material of which it is composed and in the general configuration of the petals or separated supporting portions as the case may be and the manner of affixing the ball supporting cup to the shaft may be varied and it is to be understood that the shaft may be of wood, metal or any rigid material or synthetic without departing from the spirit of this invention and this invention shall be limited only by the appended claims.

What is claimed is:

1. A golf tee comprising a shaft having at one end a point for insertion into the ground, a ball supporting element mounted on the other end of said shaft and composed of a central part connected to said shaft and having integrally connected to the outer peripheral edge portion thereof a plurality of separate petals radiating outwardly from said central part so that the upper surfaces thereof normally define throughout their entire areas a cupped seat for the ball, said petals being constituted of flexible material and being of such flexibility that they can yieldingly move from such normal condition to conform to the engaging surface of the ball to enable said outer peripheral edge portion of said central part to coact with said petals to form the seat for the golf ball, the flexibility of said petals being such that they yieldingly move to distorted positions under the forces applied to the golf ball when struck by a golf club.

2. A golf tee as defined in claim 1, in which each of said petals is provided with a radially disposed reinforcing rib located centrally of said petal on the underside thereof and extending outwardly from a point within the outer periphery of said central part towards the outer periphery of said petal.

3. A golf tee as defined in claim 2, in which said central part has integrally formed therewith an attaching portion enclosing the other end of said shaft, and in which said reinforcing ribs span said peripheral edge portion of said central part and are integrally connected to the exterior surface of said attaching portion.

4. A golf tee comprising a shaft having at one end a point for insertion into the ground, a ball supporting element mounted on the other end of said shaft and composed of a ball supporting portion and an attaching portion for connecting said element to said shaft, said ball supporting portion having a central disk part integral with said attaching portion and having a plurality of separate petals radiating outwardly from said disk part so that the upper surfaces thereof define throughout their entire areas a conically-shaped annular seat for the ball, the upper peripheral edge portion of said central disk part from which said petals radiate, being located above said attaching portion and said other end of said shaft, and together with said petals forming the seat for the golf ball, and said petals being constituted of flexible material and being of such flexibility, that they yieldingly move to distorted positions under the forces applied to the golf ball in the use of the tee.

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5. A golf tee as defined in claim 1, in which said other end of the shaft is reduced in cross-sectional area to provide a stop shoulder spaced downwardly from the upper extremity thereof, said reduced other end portion being of greater cross-sectional area at a place spaced from such stop shoulder than adjacent thereto, and, in which said central part has integrally formed therewith an attaching portion enclosing said reduced other end portion and provided on its interior surface with ridges frictionally engageable with the part of said other end portion having greater cross-sectional area.

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References Cited

UNITED STATES PATENTS

310,456	1/1885	Mitchell	-----	273—70
638,920	12/1899	Grant	-----	273—207
2,839,304	6/1958	Lerick	-----	273—207
2,884,250	4/1959	Patterson	-----	273—207 X

FOREIGN PATENTS

236,132	7/1925	Great Britain.
238,599	8/1925	Great Britain.
435,945	10/1935	Great Britain.

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