

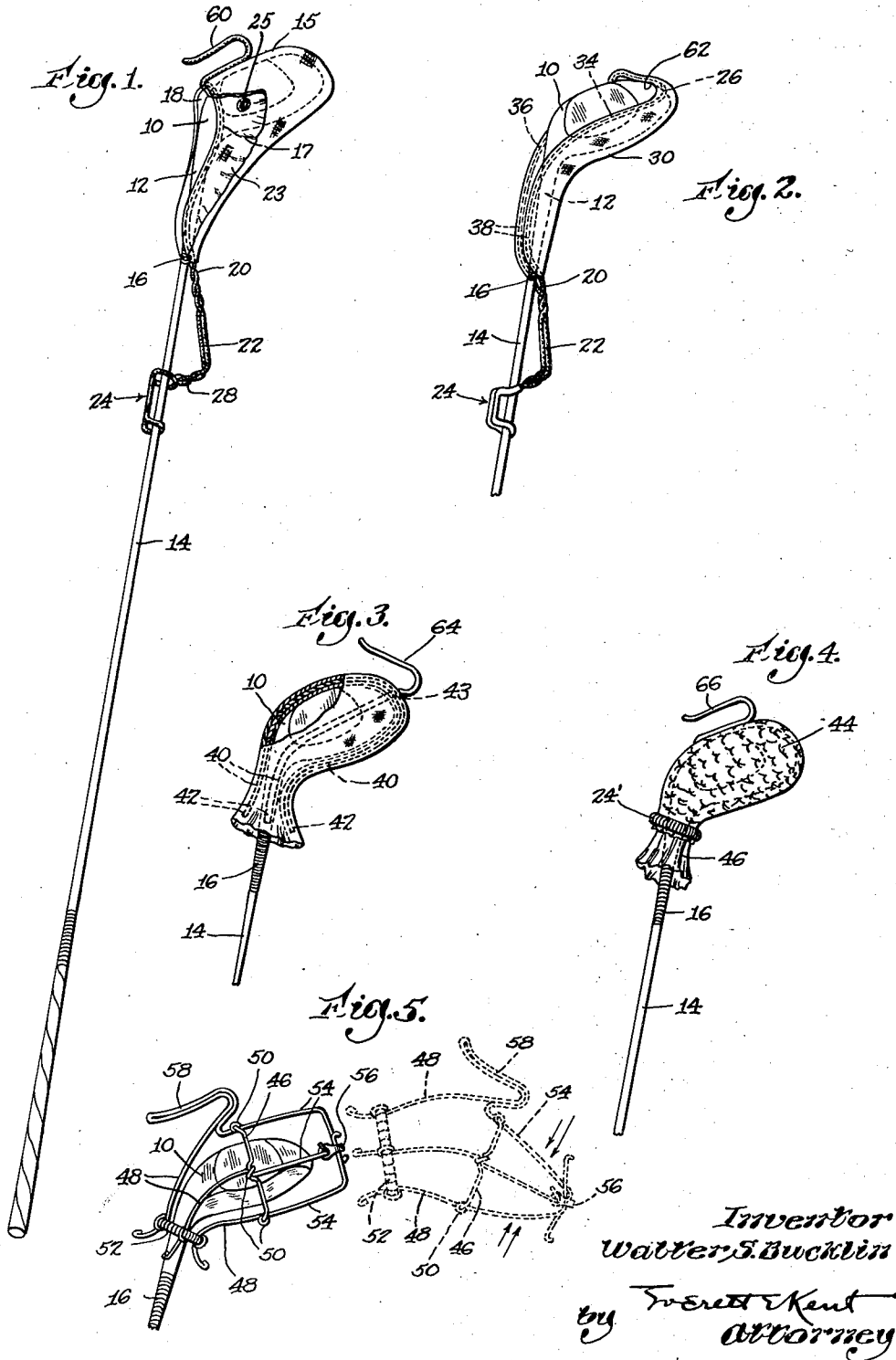
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PROTECTION FOR GOLF CLUB HEADS

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PROTECTION FOR GOLF CLUB HEADS

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16 Claims. (Cl. 150—52)

This invention relates to improvements in protection for golf club heads.

More especially it relates to means for protecting the head and adjacent shaft of a wood club against scratches and other defacing marks. The top, back, toe and heel of the club head, and the neck where the head is attached to the shaft, are nicely finished and may be beautiful surfaces; and there is nothing in the play of the game of golf which need mar them; but it is a common experience that they become defaced by the handling of other clubs into and out of the golf bag in which they are held. It is the object of the present invention to forestall and prevent such a deterioration in an effective manner, without introducing delay or inconvenience for player or caddie.

The prevalence of this evil is so well recognized that devices have already been proposed for housing the wood clubs individually, either in a separate compartment, or in attached extensions of the golf bag, or in independent cases applied to the club head and its adjacent shaft. But all such devices known to me are open to practical objections. When a separate compartment is provided, the wood clubs may rub against each other. When a special contrivance is used the operative parts on adjacent clubs sometimes become entangled with each other. Sometimes a particular kind of manipulation is required, to get such a housing off the club head, or to get it on; and a caddie unfamiliar with it has trouble to master the operation, and may even do damage in his effort. In simpler constructions the housing may become knocked or rubbed off when a caddie is drawing an iron from the bag. Or, if thoroughly wrapped and tied, the caddie is unable to produce the wanted club instantly at request,—all with the general effect of annoying the player or defacing the club.

It is therefore a purpose of the present invention to provide a device which will not only be effective for protecting the head and adjacent parts of the club, but will also be so constructed that the manner of its application and removal will be obvious and easy. Another purpose is that it shall be so securely held in position, when on the club, that the housing cannot be removed from the club unintentionally, as by the handling of adjacent clubs.

To this end the invention provides a soft hood or other housing in the nature of an enveloping pad, for encasing the head and so much of the adjacent parts of the shaft as are desired; and provides means for the easy passing of the mouth

of the hood over the club head; and provides spring clamping means, the action of which is automatic, both for opening and for closing, for holding the hood in place on the club. The housing pad may be of cloth or knitted fabric or other substance. The mouth may be spread permanently open, either to a partial extent or fully, for the easy applying and removing of the device.

The head and neck of a wood club constitute an object of peculiar shape, as used in the game of golf. The head is an unsymmetrical block. It has at one side a plane face for striking the ball; a deep bulge on the opposite side, behind that face; there is a rather flat sole; but both sole and top have a gentle curve toward the toe; and the neck grows out of the heel and top of the club head so that the head stands out from the shaft at an angle of 120°, more or less. These peculiarities occasion difficulties, which it is a purpose of the invention to surmount, in the making of a device for complete protection coupled with possibility of easy and instant removal or replacement.

The invention, which may be expressed in several varieties of embodiments, provides a structural frame which is adapted to be associated with those parts of the club that are to be covered, and to hold the hood there by the action of a spring clamp in the frame whose contractile seizure is automatic, and which becomes automatically released for withdrawal from the club by the simple act of a person in taking hold of the device and moving it in the direction which appears natural for removing it. A frame, which may be of wire, maintains the hood mouth open to the requisite shape, and maintains the requisite shape and position of clamp. This may itself constitute the clamp,—or the clamp may be a separate attached element. This frame holds the body of the hood with mouth partly opened or fully opened, according to which is the style of the particular embodiment, so that the open mouth and hood can be thrust along the head of the club to or from the neck joining the head to the shaft. The neck and the shaft are approximately alike in dimension. Considering neck as a part of shaft, the clamp can be so made as to come to rest close to the block which constitutes the head; or so made as to grip at a place further along the shaft, in order to cover all that extent of neck which is of wood integral with the head; or still further along, so as to cover the winding of cord usually found where the neck and shaft are spliced together, in which case the clamp grips the shaft beyond the winding.

In either case the surfaces of the lips at the entrance to the clamp are rounded or sloping, this constituting cam lips which spread against their sustaining spring when they are pressed against the thing they are enclosing, or are to enclose. In one instance illustrated this curvature is the side of a spiral spring, formed as a ring for slipping over the block-like head of the club; in another, in which the clamp engages the shaft of the club, it is the flare of the lips of the clamp.

For this last form the invention provides a frame of wire which has a broad loop at the toe of the club, broad enough to enclose the head. The wires of the loop pass the flat front face and the bulging rear face of the block at a suitable distance for holding the hood open, and they then reach and continue along the shaft where they are formed into both a clamp and a handle. The handle is for removing or replacing the hood, and for making that clamp disengage or engage the shaft. When the clamp is engaged with the shaft, other parts of the frame overlie the head so that the device cannot be pulled off. But the caddy who is serving the club has only to take the device by the handle and move in direction to remove the hood from the head. This movement first pulls the clamp off from the shaft and then swings the frame so that it clears the head and has a free path for departure in the natural direction of removing it. In another embodiment the clamp may be applied at that part of the shaft herein called the neck, close to the head; and in that case the head frame need not extend along the shaft. The clamp then is the leading part of the head frame, and may outline open lips of the mouth, being for example an open circular spiral spring, which mouth, when being applied, stretches with appropriate distortion, to pass the bulge of the block, and then shrinks toward a closed position in proximity with the neck. A person applies it by merely pushing it over the head; and its circle spreads again when a person merely pulls it off in the direction of the axis of the head.

In any of the embodiments suitable cushioning material of fabric or otherwise may protect the wood from the steel or brass of the spring.

It is intended that the patent shall cover, by suitable expression in the appended claims, whatever features of patentable novelty exist in the invention herein disclosed.

In the accompanying drawing:

Figure 1 is a perspective of a golf club equipped with a protecting hood embodying features of the invention;

Figure 2 is a similar view of another embodiment, wherein the hood is of modified form;

Figure 3 is a perspective of another form of protecting hood;

Figure 4 is a perspective of still another modification, and

Figure 5 shows still another form of protecting hood whose mouth is openable by collapsing the remote body portion of the hood and frame, the hood material being omitted for clearness.

Referring to the drawing, the golf club 10 may be regarded as representative of golf clubs in general, inasmuch as the invention can also be applied to clubs with metal heads, if desired.

In Figure 1 the head end of the club is encased within a hood which, in this form, may be in the nature of an open bag 15 having dimensions to fit easily and loosely over the block 10

which constitutes the head of the club, and more or less to cover the neck 12. This neck 12 is integral with the head, but it may be herein considered as a part of the shaft, which consists of the neck 12 and the rod 14 to which the neck is spliced at a place covered by the winding 16. The bag 15 constituting the hood may be mounted on a suitable wire frame which provides a sufficiently stiff rim 17 at the open mouth 18 of the hood, and this frame has a portion 20 extending along the shaft to constitute both a handle 22 and a spring clamp 24 for detachably securing the frame in this position on the club.

For convenience and economy, the frame may be a bent wire structure formed with the loop 17 within a hem of the hood to constitute the said mouth of the hood. As represented in Figure 1, the walls of the hood are not framed beyond the rim at 17, but in the direction of the shaft they may extend so as to overlie the neck and winding 12, 16. However, and if desired, suitable extensions of the frame might be arranged for giving shape to the fabric walls, in either direction from the rim 17, and for reinforcing them, or for holding wadding wherever desired. Also, if desired, hood material may be available as at 23, in Figure 1, for being brought around under the neck 12 and winding 16 for covering such surfaces thereof as might otherwise be exposed and unprotected, and may have a snap fastening 25 if desired.

The frame may be made of a single piece of wire, bent into the rim 17 at the heel of the club (Fig. 1) or bent into the hook loop 26 to engage the toe of the club (Fig. 2); and may be twisted as at the portion 20 at the neck, for stiffness. Side bars of the frame may overlie the face and back sides of the block, as illustrated in Figure 2; or might pass below and outside of them; or be beyond them as in Figure 1. The hood may be of any suitable material, and may have a hem or surface straps to cover the wire or to intervene between the wire and the surface which is to be protected. The handle 22 may be of any shape which is convenient for a person to grasp; and the spring jaws as at 24 may be beyond the handle 22, as illustrated, or may be located in position for engaging elsewhere around the shaft of the club to hold the frame and hood securely in place. Preferably the frame, at places of contact with the shaft, will be covered with a cushioning material, which may be rubber tubing, or cotton and wax-like insulation 28, which will prevent scratching or other marring of the shaft.

It will be obvious that the frame may take various forms, as also may the securing means 24, the primary idea of which is that it shall be adapted to become engaged with and disengaged from the shaft by some simple means, as by being pressed toward its seat, or pulled from it.

Figure 2 shows a form of protecting hood corresponding to the bag 15 but with that part of the frame which surrounds the block located at the toe rather than at the heel, and leaving the heel and sole of the club head not covered. This does no harm since these portions are subject to abrasion in play. The club is pictured with sole upward, and the frame loop is bent into a toe-engaging hook 26; and its side members 34, 36 extend, one along each side of the head, on modified courses along the splice winding 16, as at 38, beyond the neck. The hood material 30, of Figure 2, carries the frame in a hem, for protection of the wood; and extends loosely over the polished portions of the head

from side member to side member of the frame. The hood material extends also over the splice winding 18, having wings between which the spliced and neck regions of the club may fit. Beyond, the frame is formed with the handle 22 and has clamping means 24.

The hoods of Figures 1 and 2 illustrate two extremes as regards the degree of protecting covering provided for the club head, the one covering all of the head forward of the heel and having its open mouth in the region of the heel, and the other covering the toe and upper portions of the head, leaving portions, including the playing face, uncovered. But obviously the hood may extend around the head to any location between these two extremes; or might even extend somewhat beyond the heel, if desired.

In another embodiment of the invention spreadable spring jaws engage the neck of a club and constitute a frame for the hood. Figure 3 illustrates this form, wherein a plurality of U-shaped strips 40 of flat spring metal have their ends respectively approaching each other at the open end of the U, and thence flare outward as at 42 to provide for easy and non-abrasive entrance of a club head between the respective U-arms. The plurality of U-springs may be secured together at the crossing U-bridges as at 43. The ends of the U-springs, at the regions 42, may have curved fingers extending laterally for standing around opposite sides of the shaft at that location. If the spring strips 40 are within the hood they may be suitably covered for protection of the wood, the hood being loose enough and large enough to permit the needed spreading of the spring arms as the hood is being thrust over the bulge of the block.

In Figure 4 a fabric of springs is represented at 44 in the shape of a bag for fitting over the head of a club. The spring fabric provides for needed expansion and contraction of hood, and the wood of the club may be protected from abrasion by a lining of suitable soft padding material which may project beyond the mouth of the spring bag 44 as at 46, for shielding the winding of the club. Preferably, a single coil spring 24' will encircle the mouth of the spring bag to ensure that the mouth will contract around the neck of the club following the passage of the head therethrough. The spring mesh 44 is represented in a conventional manner as having members expansible in direction around the bag, and other members expansible in direction along the bag. And these members may be inter-engaged coil springs of suitable size and degree of tension.

Figure 5 shows a hood and frame wherein the frame is operable to open the mouth of the hood by a squeezing of the frame and hood at a location remote from the mouth. For clearness the cloth bag, which ordinarily would constitute a lining for this frame, is omitted, and the frame is shown in full line position closed over the head of a club and, in dotted position, with its mouth spread open as a result of squeezing the remote body of the frame. A stiff ring of metal 46 is of diameter to fit loosely over the club head block, and it constitutes a support for pivotal mounting of a plurality of levers 48 which are spaced at intervals around ring 46. As represented, there are four levers 48, each in the form of a stiff wire, and each pivotally mounted, at a mid-location along it, to the ring 46, by means of a mere looping of it around the ring as at 50. A coil spring 52 defines the mouth of

the hood frame, and each lever 48 has an end engaging the coil spring, so that a spreading of the spring-engaging ends of the plurality of levers expands the spring to permit the head of a club to pass into the hood or to be withdrawn therefrom.

As in the other cases, a pulling or pushing of the mouth against the block will spread the cam lips open, to remove or replace the hood.

Each lever 48, beyond its pivot 50, has extent as at 54 sufficient to clear the toe portion of an enclosed head, and each provides necessary clearance between its extension 54 and the head so that the extensions 54 as a group may be pressed toward the head for expanding the spring 52 at the mouth. And the extensions 54, beyond the toe of the head, turn sharply toward the axis, and have their ends tied together by a slip element 56 through which all of the lever ends are slidable relative to each other. In the drawing, the lever arms or extensions 54 are shown dotted in their pressed-in position, with the mouth dotted open. The spring 52 draws the levers back to the normal full line positions as soon as the pressure at 54 is removed.

Conveniently a hook 58 may be provided on the frame of Figure 5, for hanging the hood on the golf club bag while the particular club which was protected by the hood is in use.

Also, each of the other forms of the invention may embody such a hook for convenient temporary association of the hood with the club bag during times when the hood may be temporarily out of service. In Figure 1 such a hook is represented at 60, as a projection of the frame at the mouth of the hood.

Figure 2 shows a hook 62 formed as an incident of the toe-engaging part of the hood. And Figures 3 and 4 have the hooks 64, 66 respectively, each in position to be unobtrusively out of the way when the hood is in use on a club, yet conveniently ready for being engaged over the rim of a bag when the hood is detached from its club.

The wires may be of non-corrosive metal; if covered the covering may be a wrapping of the wire, as of cotton and wax, or may be a hem or strap pocket in the fabric. The soft cloth fabric protecting the wood may be within the frame; or outside of it; or in some cases omitted. If omitted the wires themselves will usually be covered or else be so smooth as not to mar the finished wood surfaces; and the wires will, in such cases, be close enough together to constitute a cage affording the needed protection, as by having more levers in the style of Figure 5; or by the continuous mesh of Figure 4.

I claim as my invention:

1. A protecting device for the head portion of a golf club, comprising a hood for the club's head; a frame, at and maintaining an opening at the mouth of the hood; and a spring clamp in the frame, having cam lips for the springing of the clamp past a part of the club to grip the club for holding the hood in place.

2. A protecting device for the head portion of a golf club, comprising a hood for the club's head; a frame, at and maintaining an opening at the mouth of the hood; and a spring clamp in the frame, adapted to enclose the shaft of the club thereby to grasp the club; said clamp having sloping lips whereby pressure of those lips against the part enclosed by said lips expands the clamp, for the passing of the clamp to or from gripping position.

3. A protecting device for the head portion of

a golf club, comprising a hood for the club's head; a frame, at and maintaining an opening at the mouth of the hood; and a spring clamp in the frame, adapted to enclose the shaft of the club thereby to grasp the club; said clamp having sloping lips whereby pressure of those lips against the part enclosed by said lips expands the clamp, for the passing of the clamp to or from gripping position; there being a part of the frame extending along the club shaft and holding said spring clamp.

4. A protecting device for the head portion of a golf club, comprising a hood for the club's head; a frame, at and maintaining an opening at the mouth of the hood; and a spring clamp in the frame, adapted to enclose the shaft of the club thereby to grasp the club; said clamp having sloping lips whereby pressure of those lips against the part enclosed by said lips expands the clamp, for the passing of the clamp to or from gripping position; there being a part of the frame extending along the club shaft, holding said spring clamp and constituting a handle for applying and removing the clamp and hood.

5. A protecting device for the head portion of a golf club, comprising a hood for the club's head; a frame, at and maintaining an opening at the mouth of the hood; and a spring clamp in the frame, having cam lips for the springing of the clamp past a part of the club to grip the club for holding the hood in place; the said frame which maintains the hood opening being adjacent to the heel of the club, when in position on the club.

6. A protecting device for the head portion of a golf club, comprising a hood for the club's head; a frame, at and maintaining an opening at the mouth of the hood; and a spring clamp in the frame, having cam lips for the springing of the clamp past a part of the club to grip the club for holding the hood in place; the said frame which maintains the hood opening being adjacent to the heel of the club, when in position on the club, and being the said spring clamp.

7. A protecting device for the head portion of a golf club, comprising a hood for the club's head; a frame, at and maintaining an opening at the mouth of the hood; and a spring clamp in the frame, having cam lips for the springing of the clamp past a part of the club to grip the club for holding the hood in place; the said frame which maintains the hood opening being adjacent to the heel of the club, when in position on the club, and being a helical wire spring arranged as a ring for passing over the head of the club.

8. A protecting device for the head portion of a golf club, comprising a hood for the club's head; a frame, at and maintaining an opening at the mouth of the hood; and a spring clamp in the frame, having cam lips for the springing of the clamp past a part of the club to grip the club for holding the hood in place; the said frame which maintains the hood opening being adjacent to the heel of the club, when in position on the club, and being the said spring clamp; there being spring arms of the frame extending thence to the toe of the club.

9. A protecting device for the head portion of a golf club, comprising a hood for the club's head; a frame, at and maintaining an opening

at the mouth of the hood; and a spring clamp in the frame, having cam lips for the springing of the clamp past a part of the club to grip the club for holding the hood in place; the said frame being an element having ribs around the club head.

10. A protecting device for the head portion of a golf club, comprising a hood for the club's head; a frame, at and maintaining an opening at the mouth of the hood; and a spring clamp in the frame, having cam lips for the springing of the clamp past a part of the club to grip the club for holding the hood in place; the said frame being an element having spiral spring ribs around the club.

11. A protecting device for the head portion of a golf club, comprising a hood for the club's head; a frame, at and maintaining an opening at the mouth of the hood; and a spring clamp in the frame, having cam lips for the springing of the clamp past a part of the club to grip the club for holding the hood in place; the said frame having an element extending across the sole of the club head at its toe.

12. A protecting device for the head portion of a golf club, comprising a hood for the club's head; a frame, at and maintaining an opening at the mouth of the hood; and a spring clamp in the frame, having cam lips for the springing of the clamp past a part of the club to grip the club for holding the hood in place; the said frame having elements extending along the front and back faces of the club head, and an element extending across the sole thereof at its toe.

13. A protecting device for the head portion of a golf club, comprising the combination of a hood with a frame therefor having means framing the mouth of the hood, a spring clamp for holding the frame on the club, and a hook rigid with the frame for hanging the frame on a club bag when removed from the club.

14. A protecting device for the head portion of a golf club, comprising a hood having a frame of intermeshed spring metal coils formed in bag shape; said spring coils permitting expansion of the bag for receiving a club head, and having at the mouth of the bag an elastic rim spreadable by thrust against a club head; thereby to pass said head into or out of the bag.

15. A protecting device for the head portion of a golf club, comprising a hood, a frame for the hood having a plurality of levers extending endwise of the hood, with a fulcrum-ring at a mid-location; and an annular coil spring at the mouth of the hood; said spring being engaged by arms of said levers at spaced points around it; and the other arms of the levers being at the other end of the hood, and being there arranged for a person to squeeze them toward the axis, for opening the mouth of the hood.

16. A protecting device for the head portion of a golf club, comprising a hood of flexible material including a mesh having elastic elements extending through the body of the hood, and having at the mouth of the hood an annular elastic rim having a normal relaxed position in which it holds the mouth partly open, to an extent from which it is spreadable by thrust against a club head, thereby to pass said head into or out of the hood.

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