April 29, 1958 A. STRUB 2,832,598

SHUFFLEBOARD CUE

Filed April 4, 1955

FIG. 1

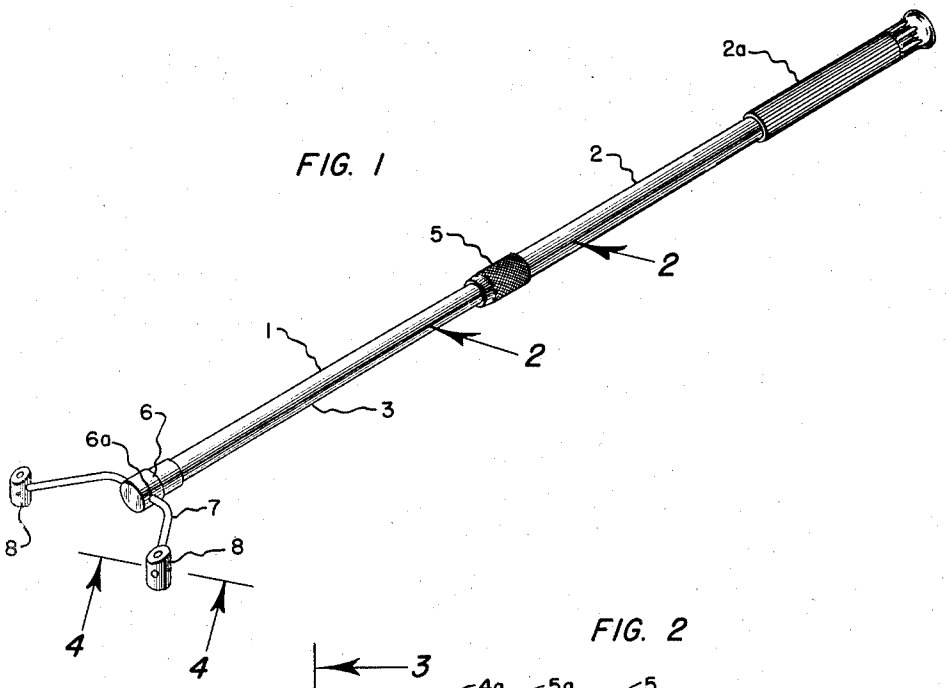


FIG. 2

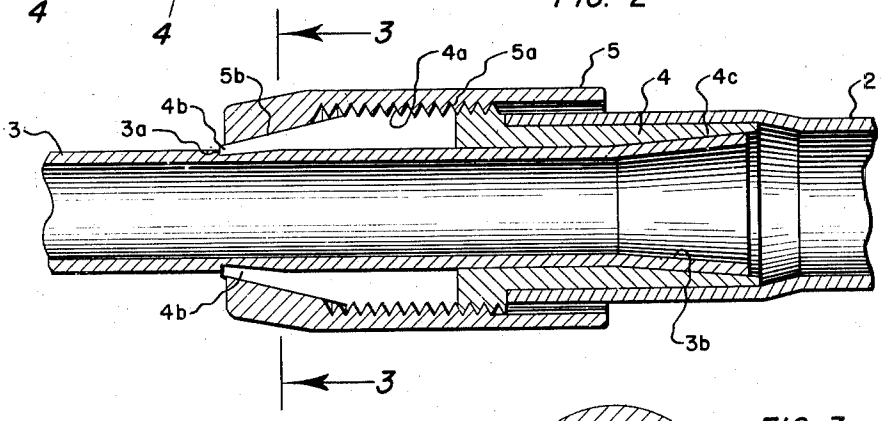


FIG. 3

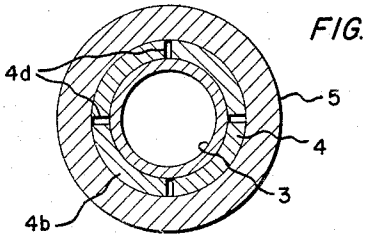
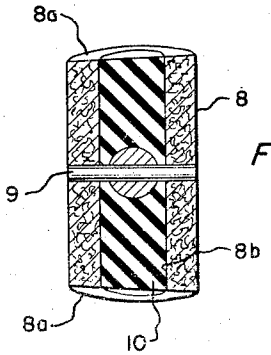


FIG. 4



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SHUFFLEBOARD CUE

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1 Claim. (Cl. 273—129)

My invention relates to a shuffleboard cue, more particularly, a cue adapted to be telescopically reduced in length for convenience of transporting in a vehicle or carrying case and the objects of my invention are:

First, to provide a shuffleboard cue having telescopic handle members that become absolutely rigid and free from movement or wobble at the joints thereof when the handle is in an extended position.

Second, to provide a shuffleboard cue employing a collet as a means for positively locking the handle thereof in a telescopically extended or retracted position.

Third, to provide a shuffleboard cue having a telescopic handle adapted to be held in a positive extended position by the action of the segmental collet members engaging a buttress on the adjoining extended handle portion.

Fourth, to provide a shuffleboard cue adapted for telescopic extension of the handle thereof whereby the telescoped handle portion is provided with a flared end engageable with the internal cone of a collet to thereby add rigidity to the handle when in extended position.

Fifth, to provide a shuffleboard cue having disk engaging head members cored with a synthetic rubber such as "Neolite" to provide ease of operation when engaged with a conventional polished shuffleboard court.

Sixth, to provide a shuffleboard cue which is very simple and economical of construction, easy to operate, efficient in its action and which will not readily deteriorate or get out of order.

With these and other objects in view as will appear hereinafter, my invention consists of certain novel features of construction, combination and arrangement of parts and portions as will be hereinafter described in detail and particularly set forth in the appended claim, reference being had to the accompanying drawings and to the characters of reference thereon which form a part of this application in which:

Figure 1 is a perspective view of my shuffleboard cue showing the handle thereof in extended position and ready for use.

Fig. 2 is an enlarged fragmentary sectional view through the collet taken on the line 2—2 of Fig. 1.

Fig. 3 is a transverse sectional view through the collet segments taken on the line 3—3 of Fig. 2 and

Fig. 4 is an enlarged sectional view through one of the disk engaging members taken on the line 4—4 of Fig. 1.

Similar characters of reference refer to similar parts and portions throughout the several views of the drawings.

The handle 1 consists of a telescoping handle 2 in which a reduced diameter handle member 3 is slideably and telescopically positioned. A collet 4 is pressed into the end portion of the telescoping handle 2 and extends outwardly therefrom, the projecting portion thereof being of a slightly larger diameter than the handle 2 and having screw threads 4*a* adapted to engage with mating threads 5*a* internally of a collet sleeve 5. Tapering jaws 4*b* of the collet 4 are divided into quadrants by saw cuts 4*d* extending into the threaded portion 4*a* to thereby provide resilience to the jaws 4*b* for clamping to the handle

member 3. An internal coned-shaped bore 5*b* in the collet sleeve 5 is adapted to engage the tapering jaws 4*b* to thereby compress the jaws 4*b* around the handle member 3 when the collet sleeve 5 is tightened on the screw threads 4*a* of the collet 4. A buttress 3*a* is formed in the handle member 3 in spaced relation to the flared end 3*b* thereof for engaging the tips of the tapered jaws 4*b* thereby preventing the handle member 3 from sliding inwardly of the collet 4 and telescoping handle 2. The portion of the collet 4 extending internally of the telescoping handle 2 is provided with an internal cone 4*c* substantially equal in taper to the flared end 3*b* of the handle member 3. It will be noted that the tapered jaws 4*b* are clamped to and engaged with the buttress 3*a* of the handle member 3 while the flared end 3*b* is tightly engaged with the internal cone 4*c* of the collet 4 thereby providing clamping support at two areas on the handle member 3.

The end of the handle member 3 opposite the flared end 3*b* is provided with a head support fitting 6 rigidly secured thereto by press fitting or the like. A yoke member 7 extends through an opening 6*a* in the head support fitting 6 at substantially right angles to the axis of the handle member 3 and is rigidly secured to the head support fitting 6 by press fitting or the like similar to the connection of the head support fitting 6 with the handle member 3. The ends of the yoke member 7 converge toward the axis of the handle 1 to form a substantially Y-shaped configuration relative to the handle 1. Each end of the yoke member 7 is provided with shuffleboard disk engaging members 8 secured thereto by pins 9 extending through the disk engaging members 8 at right angles to the yoke member 7. These disk engaging members 8 are substantially cylindrical with truncated ends 8*a* forwardly inclined at an angle to permit the truncated ends 8*a* to lie in a parallel plane to the shuffleboard court when held in position for use by a shuffleboard player. A synthetic rubber core 10 such as "Neolite" is pressed into openings 8*b* in the disk engaging members 8 and serve to provide long-wearing gliders on which to slide during manipulation of the shuffleboard cue on the shuffleboard court.

In operation, my shuffleboard cue is first extended to the position as shown in Fig. 1 of the drawings by loosening the collet sleeve 5 to permit expanding of the collet jaws 4*b* out of frictional engagement with the handle member 3. The handle member 3 is thus free and may be telescopically extended from within the telescoping handle 2 until the flared end 3*b* of the handle member 3 engages the internal cone 4*c* of the collet 4 whereupon the collet sleeve 5 is then tightened on the threads 4*a* of the collet 4 to force the cone-shaped bore 5*b* against the tapered jaws 4*b*. Continued tightening of the collet sleeve 5 forces the tapered jaws 4*b* of the collet 4 to engage the buttress 3*a* of the handle member 3 thereby frictionally locking the handle members 2 and 3 against rotation while positively securing against telescopic retraction. It is to be noted that one or more collets may be employed as desired to telescopcially shorten the handle 1 to any length suitable for transporting my shuffleboard cue in confined spaces such as in a carrying case or vehicle. A handle grip 2*a* having suitable serrations thereon is positioned on the telescoping handle 2 to provide a firm hand-hold when using my cue.

When it is desired to collapse the handle 1 for transporting, the collet sleeve 5 is first loosened to permit the tapered jaws 4*b* to spring outwardly away from the handle member 3 whereupon the handle member 3 may be moved inwardly of the telescoping handle 2 until the collet jaws 4*b* strike against the head support fitting 6 whereupon the collet sleeve is again tightened to prevent accidental extension during transportation.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

In a shuffleboard cue, comprising an elongated handle and a cue head mounted thereon, said handle including telescopic upper and lower sections formed of tubular metal with the upper section of increased diameter for slidably and telescopically receiving the lower section, the inner end of the upper section being provided with a reducer sleeve having an externally threaded flange provided with a series of circumferentially spaced longitudinally extending slots forming a series of gripping jaws adapted to frictionally engage the lower handle section when said sections are extended, a tapered outwardly flared portion on the inner end of the lower section adapted to cooperate with a correspondingly shaped tapered portion on said sleeve to lock the upper end of the lower section in frictional engagement with the lower end of the upper section when said handle sections are extended, a locking sleeve threadedly received on said first named sleeve having a cam shoulder adapted to engage a cam portion on the ends of said gripping jaws and urge said gripping jaws into frictional locking engagement with the upper end of said lower section in spaced relation from the cooperating tapered locking portion when said handle sections are extended, said head including diverging arms having shuffleboard disc engaging members of round section with the ends thereof truncated to lie in parallel relation with the shuffleboard court when the cue is used, said round shuffleboard disc engaging members being cut at their ends so that the shuffleboard cue can be reversed when one of the truncated surfaces becomes worn.

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