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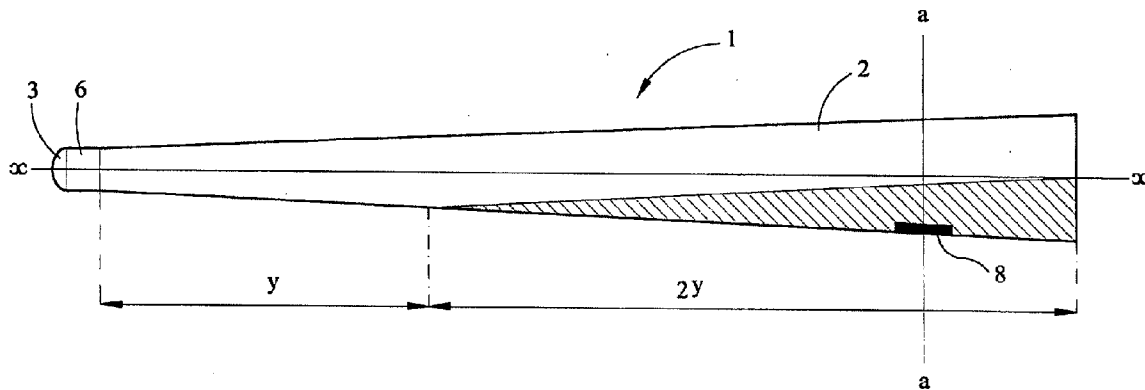
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(GB)(21) Appl. No.: **12/359,390**(57) **ABSTRACT**(22) Filed: **Jan. 26, 2009**

The present invention provides a sports cue for improving the consistency of a player's shot. The sports cue includes a tapered length of material having a longitudinal axis there-through, wherein the density of material above the longitudinal axis is less than that below the longitudinal axis to form a "bottom-heavy" cue.

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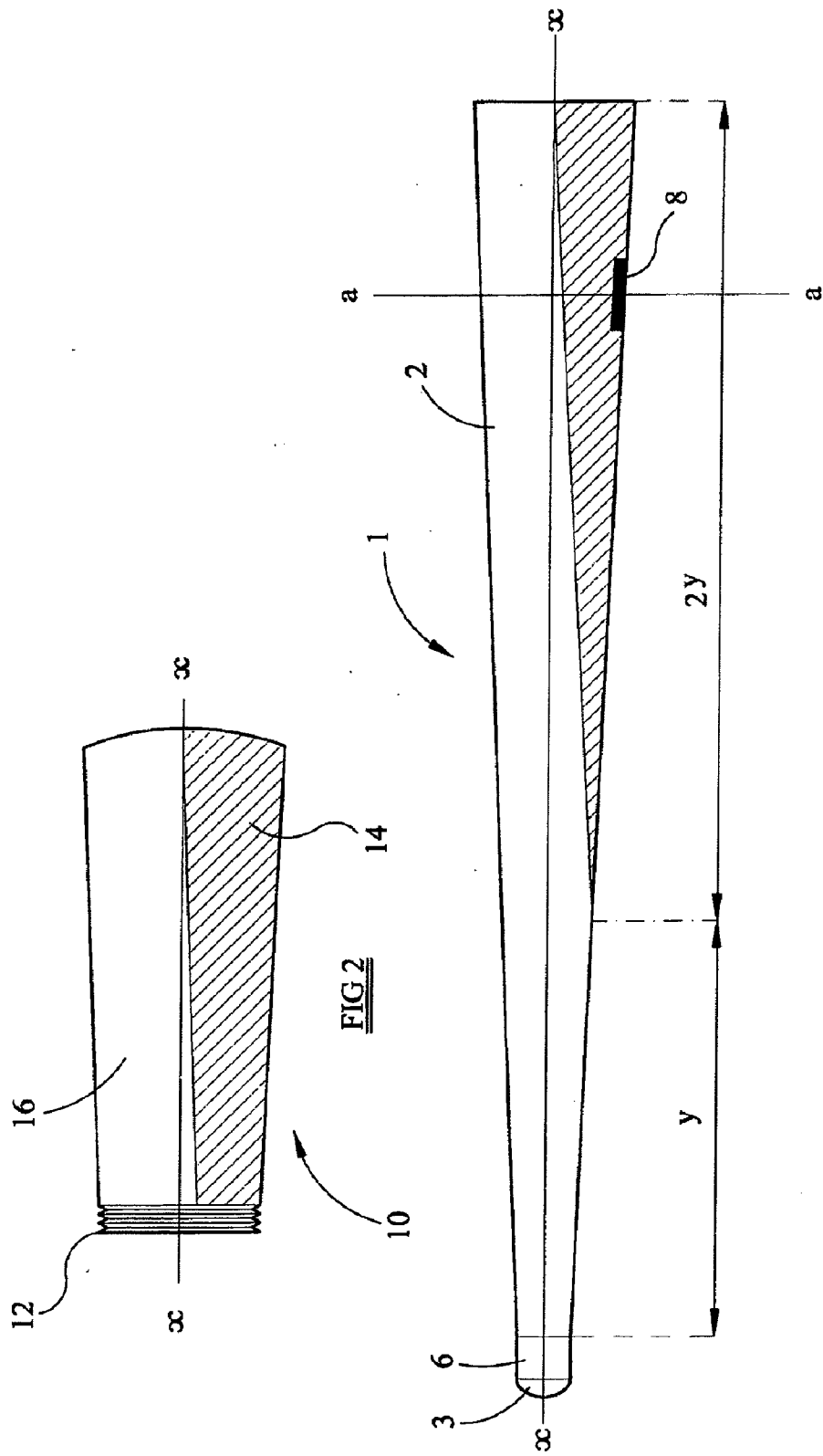


FIG 1

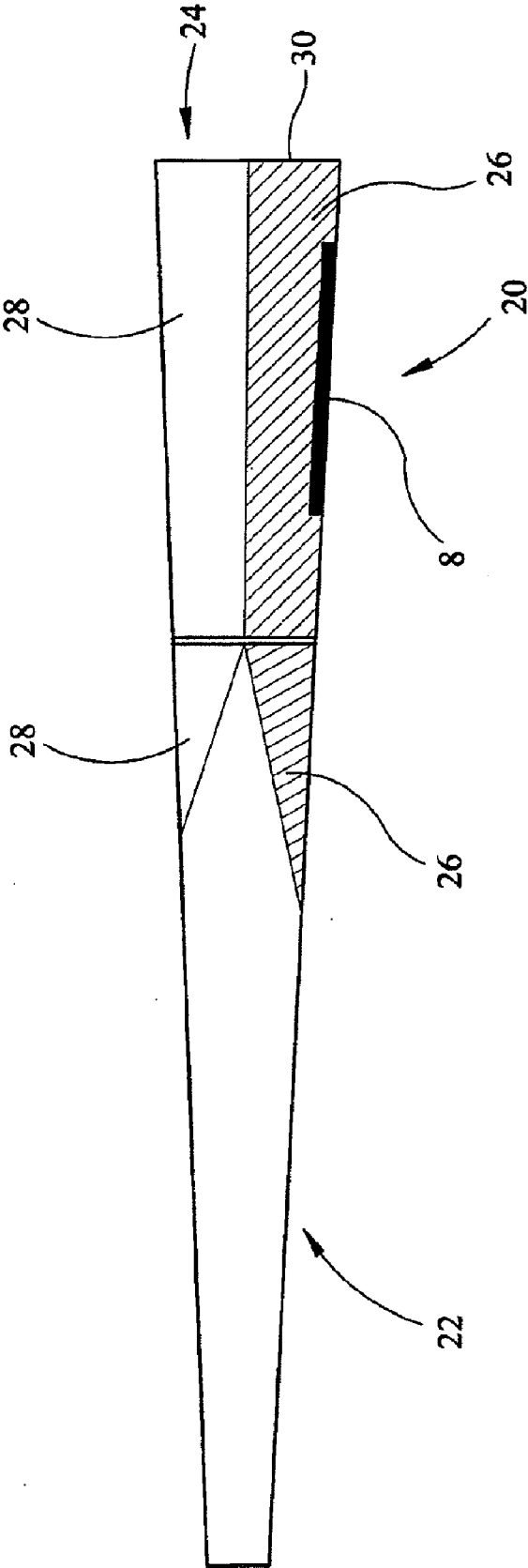
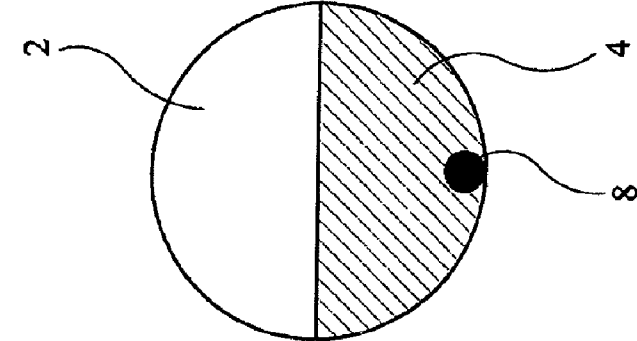
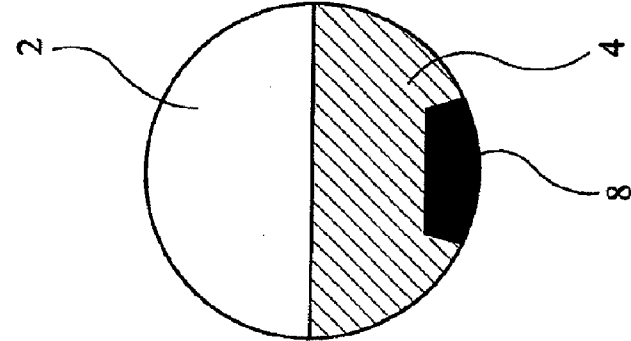
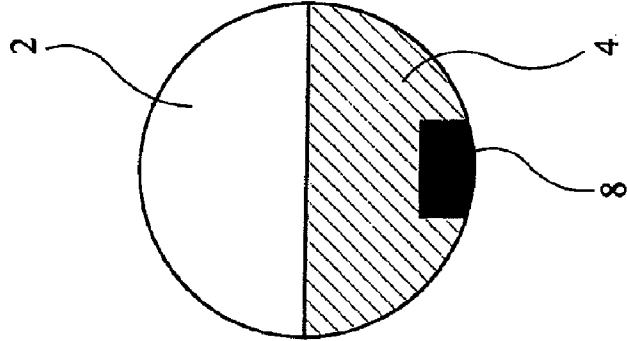
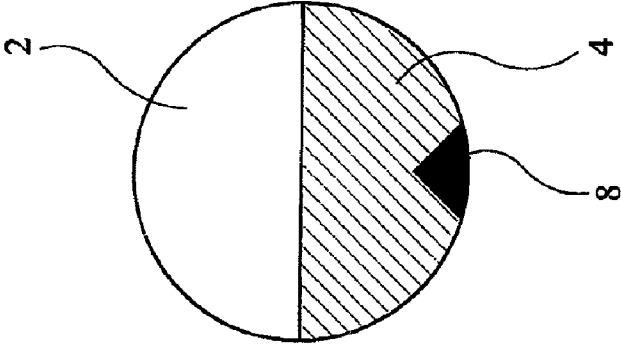


FIG 3



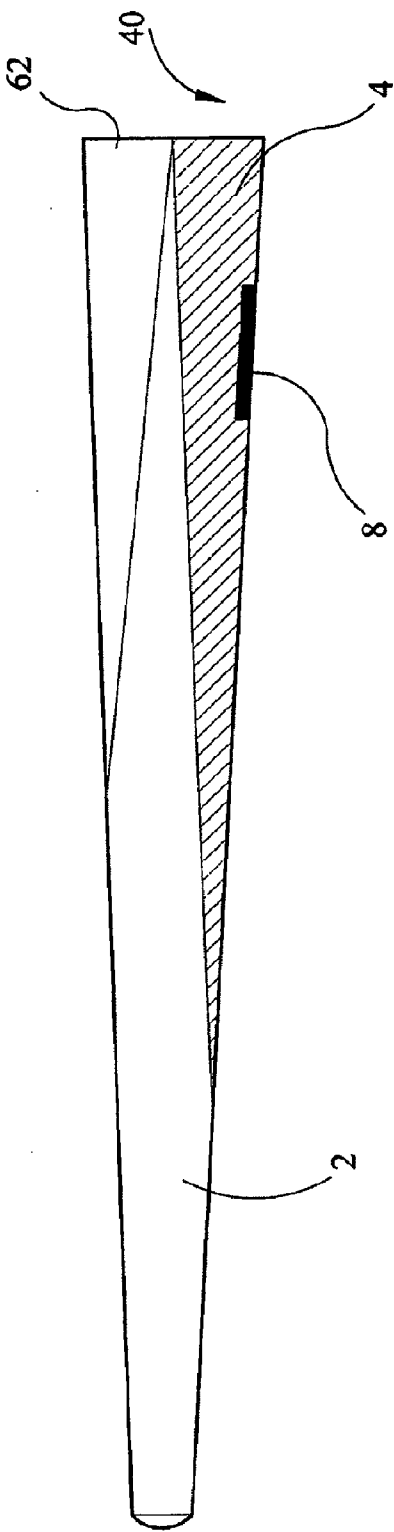


FIG 5

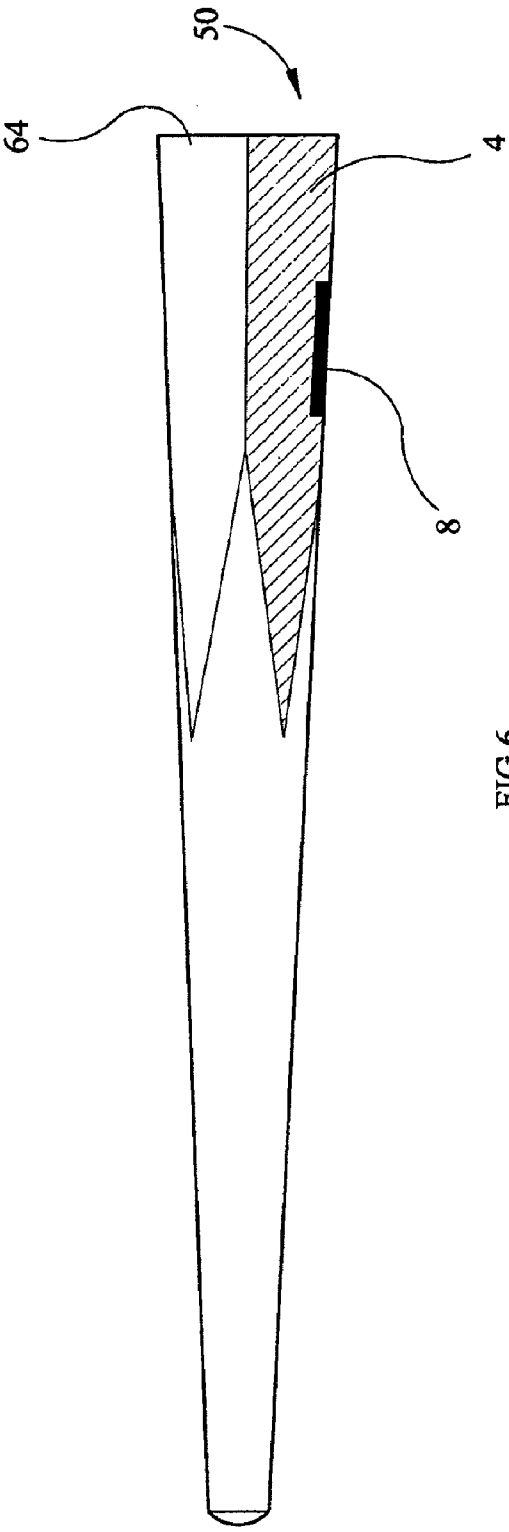


FIG 6

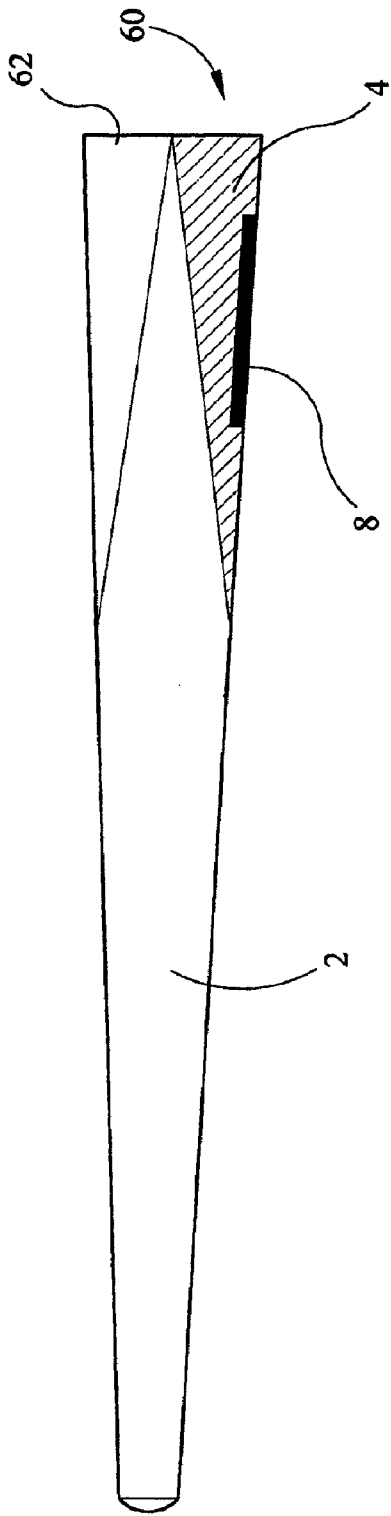


FIG 7

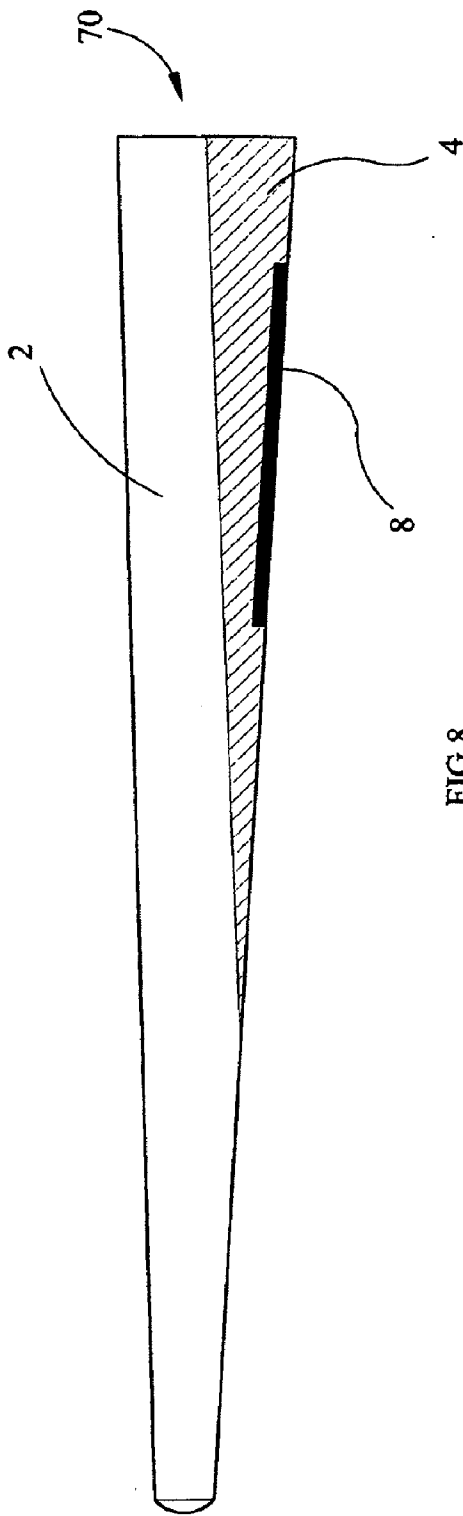


FIG 8

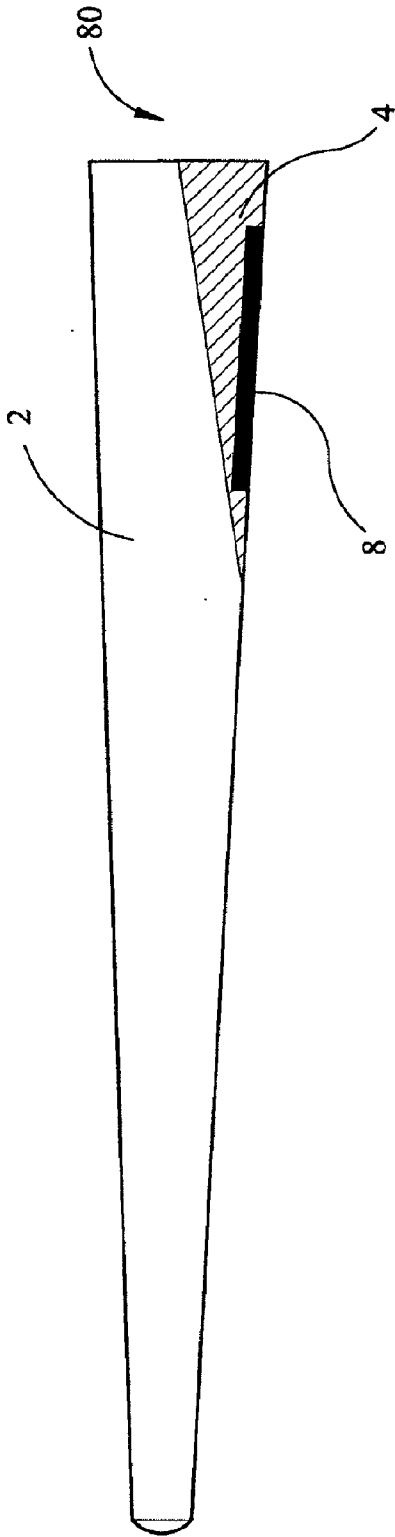


FIG 9

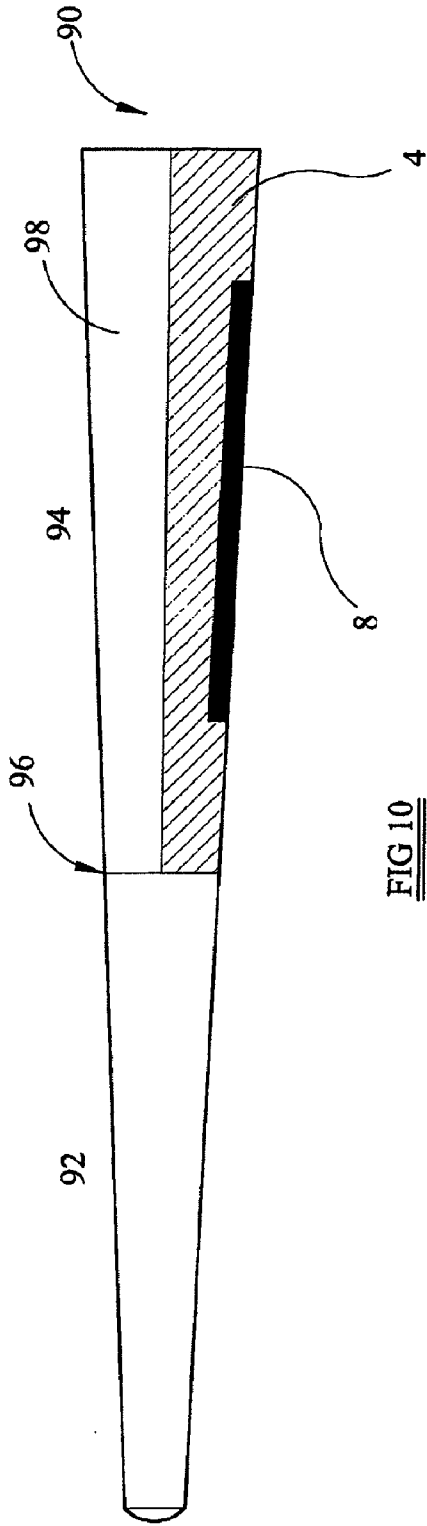


FIG 10

SPORTS CUE TRAINING AID

RELATED APPLICATIONS

[0001] This is a continuation application of International Application PCT/GB2007/002850, filed Jul. 26, 2007, which claims priority to GB 0614813.4, filed Jul. 26, 2006, and also claims priority to GB 0619329.6, filed Oct. 2, 2006, all of which are hereby incorporated by reference in their entirety.

BACKGROUND

[0002] The present invention relates to a sports cue for combined training and improved play, more particularly to a cue that is adapted to improve the consistency of a player's shots.

[0003] Conventional cues comprise tapered sticks that are generally made from wood having a wider butt connected to a smaller shaft that terminates in a tip for contacting a ball in play. The cue normally has a uniform taper. The butt and shaft may be made of different types of wood and be connected together by means of a joint. The bulk of the weight of the cue is usually distributed in the butt, generally within its core. The tip is normally of leather and is held in place by a ferrule, comprising a cuff at the end of the shaft. The ferrule may be made of ivory, carbon fibre, plastic or brass.

[0004] Numerous training aids for cue sports (snooker, billiards, pool and the like) have been developed but most, if not all, relate to separate pieces of equipment that may be used in conjunction with the cue to assist a player in achieving a straight shot in a desired direction. While these types of aids are useful in improving the technique of the player, they are somewhat artificial in that the player is practicing using additional tools that cannot be used legally in competitions.

SUMMARY OF THE INVENTION

[0005] In an exemplary embodiment of the present invention, an improved sports cue is provided for improving the technique of a player that may be used legally in competitions and the like.

[0006] Accordingly, a sports cue comprising a tapered rod having a longitudinal axis therethrough is provided such that the total weight of the rod above the longitudinal axis is less than the total weight of the rod below the longitudinal axis.

[0007] In this manner, the snooker cue is "bottom heavy", that is, it has a weight bias in the intended lower half of the snooker cue.

[0008] In one embodiment, the weight of the cue may be biased by the provision of weights in the lower half of the cue. For example, at least a part of the cue may be hollowed out to form a cavity, into which is placed a heavier material, such that the heavier material is placed below the longitudinal axis of the cue relative to the weight of the material that is placed above the longitudinal axis. A suitable heavy material employed for this purpose may be, for example, but not limited to, lead. Foam or other suitable filling material may be inserted into the cavity above the longitudinal axis if so required.

[0009] Preferably, the weighted part of the cue is substantially provided in half of the cue, preferably at the wider end thereof (or "butt" of the cue).

[0010] In another embodiment, the sports cue comprises a tapered length of a body or material having a longitudinal axis therethrough such that the total relative density of the body or

material above the longitudinal axis is less than the total relative density of the body or material below the longitudinal axis.

[0011] In this embodiment, a cue is preferably made from materials having at least two different relative densities, with the material of greater density forming at least a portion of the bottom or lower side of the cue when in use, that is, below the longitudinal axis of the cue. This creates a weight bias in the cue to make it "bottom heavy" which has been found to enable a player to make improved shots with the cue.

[0012] Preferably, the greater density material comprises substantially half of the cue at the wider end thereof (or "butt" of the cue) but tapers off towards the pointed end (or "tip") of the cue to provide a narrow end that is comprised entirely of the lighter material. More preferably, only 50% to 75% of the total length of the cue comprises the heavier material. Most especially, 60 to 70% of the total length of the cue comprises the heavier material.

[0013] The relative densities of the two materials that comprise the cue are preferably in the range 1.2:1 to 1.8:1, more preferably 1.5:1 to 1.7:1 and especially about 1.6:1.

[0014] In the sports cue it is preferred that with respect to the weight distribution within the gravity cue, it is preferred that 55 to 95% of the total weight of the cue is located below the longitudinal axis of the cue. More preferably, 70 to 90% of the total weight of the cue is located below the longitudinal axis of the cue. Most preferably, however, 75 to 85%, especially around 80% of the total weight of the cue is located below the longitudinal axis of the cue. This weight distribution results in a cue with a strong longitudinal bias (See FIGS. 1-3).

[0015] This strong longitudinal bias and preferred weight distribution is achieved through the use of materials with different relative densities and the positioning of additional weights within the lower, greater density portion of the cue.

[0016] The additional weights may be comprised of, for example, but not limited to lead, brass or other similar alloys or metals (with a relative density greater even than that of the higher density material used to form the cue) or mixtures thereof, and are ideally positioned below the longitudinal axis of the cue.

[0017] The additional weights are preferably between 0.5 to 10 ounces (14.2 g to 283.3 g), more preferably 2 to 5 ounces (56.7 g to 141.7 g).

[0018] The cross section of the additional weights may be, for example, but not limited to circular, square, rectangular or triangular (See FIGS. 4a-4d).

[0019] The total weight of a sports cue is preferably between 15-25 ounces (425 grams to 567 grams).

[0020] Heavier cues having a weight of 30 to 50 ounces (425 g to 567 g) may also be manufactured for use as training cues. This further encourages a correct cue action and positioning of the wrist, arm and body during training.

[0021] The actual length of the sport cue will vary in line with the sports regulations and depending upon whether or not the cue is for use in play by junior or adult players. However, in any sport involving a cue, the cue length will preferably be greater than 3 feet (914 cm).

[0022] In one embodiment, the cue comprises two types of wood each being of different densities in accordance with the ratios given above. For example, the lighter wood may comprise, for example, ash or maple and the greater density wood may comprise, for example a hardwood such as ebony or

rosewood. The relative densities of the light and heavy woods may be, for example, in the region of 670 kg/m³ and 1120 kg/m³ respectively.

[0023] Preferably, the heavier wood comprises more than 60% of the total weight of the cue. More preferably, the heavier wood comprises between 65 and 75% of the total weight of the cue. If required, an additional weight may be provided at least partially within the section of the heavier wood to increase the total weight thereof. For example, the weight may be in the form of a piece of lead, thereby providing a cue of a particular required overall weight. More preferably, the additional weight is provided entirely within the heavier material that is below the longitudinal axis of the cue.

[0024] It will be appreciated by one skilled in the art that the other suitable materials may be employed to form the additional weight required in the heavier piece of wood.

[0025] In an embodiment of the sports cue, it is preferable for the lighter wood to have a wedge 'spliced off', to which is then adhered a wedge of a heavier wood to form a cue that corresponds in shape to a normal cue but which is still "bottom heavy". Preferably, a weight is added to the heavier wedge to form a cue of the required total set weight (normally being in the range of 15 to 20 oz, or 425 grams to 567 grams) and having the correct balance. The cue is normally around 1.5 m in length, although smaller or larger cues may be custom-made as required by the end user such as children.

[0026] It is to be appreciated that the material of choice for the sports cue is likely to be wood as this is the material conventionally used for sports cues. However, other suitable materials of different relative densities may be used, such as carbon fibre, plastic, graphite or mixtures thereof. Moreover, the cue may be provided in two or more parts, wherein the parts are provided with appropriate connectors, such as male and female threads, for mating the two together. For example, the butt and shaft may comprise separate pieces that may be connected together. However, it is important to maintain the greater relative density through one side of the butt and part of the corresponding side of the shaft to form a cue that, in the assembled state, is "bottom heavy."

[0027] In addition, sports cues may also be provided with attachments of different sizes that may be fitted to the larger end of the cue (that is, the butt), generally by means of a threaded screw mechanism, to extend the length of the cue. It is preferable for such attachments to also be comprised of materials of different relative densities, wherein the material of each particular density 'lines up' with the corresponding material in the end of the cue to which the extension is attached.

[0028] To this end, a second aspect of the present invention provides an extension for a sports cue, the extension comprising means for attachment to a cue, the extension having a longitudinal axis therethrough such that the total weight of the extension above the longitudinal axis is less than the total weight of the extension below the longitudinal axis.

[0029] Preferably, the total relative density of the material of the extension above the longitudinal axis is less than the total relative density of the material below the longitudinal axis.

[0030] The present invention is explained in more detail hereinafter on the basis of advantageous embodiments shown in the figures. The special features shown therein may be used individually or in combination to provide embodiments of the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0031] For a better understanding of the present invention and to show more clearly how it may be carried into effect,

reference will now be made by way of example only to the accompanying drawings in which:

[0032] FIG. 1 is a longitudinal cross-sectional view through a first embodiment of a cue;

[0033] FIG. 2 is a longitudinal cross-sectional view through an extension for a second embodiment of a cue;

[0034] FIG. 3 is a longitudinal cross-sectional view through a third embodiment of a cue;

[0035] FIGS. 4a-4d are cross-sectional views taken along line a-a of FIG. 1 of a cue having different types of weight that can be employed in a snooker cue;

[0036] FIG. 5 is a longitudinal cross-sectional view through a fourth embodiment of a cue;

[0037] FIG. 6 is a longitudinal cross-sectional view through a fifth embodiment of a cue;

[0038] FIG. 7 is a longitudinal cross-sectional view through a sixth embodiment of a cue;

[0039] FIG. 8 is a longitudinal cross-sectional view through a seventh embodiment of a cue;

[0040] FIG. 9 is a longitudinal cross-sectional view through an eighth embodiment of a cue; and

[0041] FIG. 10 is a longitudinal cross-sectional view through a ninth embodiment of a cue.

DETAILED DESCRIPTION

[0042] The embodiments of the present invention described below are not intended to be exhaustive or to limit the invention to the precise forms disclosed in the following detailed description. Rather, the embodiments are chosen and described so that others skilled in the art may appreciate and understand the principles and practices of the present invention.

[0043] Referring to FIG. 1 of the accompanying drawings, a snooker cue 1 according to one embodiment of the present invention is illustrated. The cue comprises a rounded, tapered length of wood having a ferrule 6 surrounding a tip 3 attached to the pointed end thereof which, in play, contacts the ball. The overall shape and profile of the cue is the same as a conventional cue enabling it to be used legally in tournaments. However, the cue is weight-biased to be bottom heavy by providing a wedge 4 of heavier wood in the lower half of the cue that is adhered to a lighter wood 2 that makes up the rest of the cue. In this manner, the total relative density of the cue is greater below its longitudinal axis x-x than above.

[0044] As illustrated in FIG. 1 of this first embodiment, the heavier wood 4 only extends approximately two-thirds (2y) along the length of the cue, thereby having around one third (y) of the length of the narrower end of the cue comprised entirely of lighter wood. Additionally, a weight 8 is secured within the heavier wood to provide a cue having its overall weight and balance maintained.

[0045] FIG. 2 of the accompanying drawings illustrates an extension 10 for use with a cue 1. The extension comprises a threaded region 12 for attachment to the end of a cue, the extension being comprised of two materials 14, 16 of different relative densities that correspond to the two materials of the cue to which the extension is to be attached. The materials are arranged in the extension such that the heavier material 14 lines up exactly with the heavier material of the cue and the lighter material 16 lines up exactly with the lighter material of the cue when the extension is fully secured to the cue.

[0046] While one embodiment comprises a cue made from wood of differing densities, it is to be appreciated that the same effect could be achieved by hollowing out at least part of

the core of the cue and providing weights, such as lead, below the longitudinal axis of the cue with a lighter material, such as foam, being provided above. This would again produce a bottom heavy cue having a “keel” effect.

[0047] This keel effect is further explained below by way of the accompanying drawings.

[0048] Referring to FIG. 3, there is provided a two piece sports cue 20. The cue again comprises a tapered length of a body or material, preferably wood, to which a ferrule and tip (not shown) can be applied to one end of the cue. The two pieces of cue, 22 and 24 are secured by a suitable attachment mechanism, such as but not limited to, for example, a screw thread attachment. The portion 24, which comprises the butt end of the cue 30, comprises a first material 26 and a second material 28, both of which are made of, for example, wood. However, the first material 26 is comprised of, for example, wood of greater density than the second material 28. Inside the greater density material 26 there is located a weight 8. The weight can be made of any suitable material such as lead. The weight 8 is secured in place in, for example, a cavity created in the first material 26. If required, the weight may be secured in place using, for example, an adhesive suitable for use with the material of the weight and the material of the first material 26.

[0049] The second piece of the cue 22 to which may be applied a tip comprises a material such as wood. In this embodiment, the second piece of the cue 22 also comprises wedges that are spliced from the original material of the tapered cue and then replaced by a suitable attachment means with a wedge of greater density material 26, and a wedge of lighter density material as in the first portion of the cue.

[0050] When the first and second portions 22 and 24 are attached, the wedges of the first piece 26, 28 align with the materials 26 and 28 in the second piece of the cue, such that the materials appear to flow continuously from one piece of the cue to the other.

[0051] The presence of the weight 8 in the heavier density material of the second piece of the cue ensures that the cue is again bottom heavy having the effect of a keel.

[0052] Referring to FIGS. 4a to 4d there is illustrated a series of cross-sectional views taken along line a-a from the cue in, for example, FIG. 1. FIGS. 4a to 4d illustrate examples of the different forms of weight 8 which can be employed in the sports cue.

[0053] The weights 8 are preferably located in the lower portion of the sports cue that is comprised of the heavier density material 4. It will be appreciated by one skilled in the art that the weights may comprise a variety of shapes with varying cross-sections. It will also be appreciated that while the weight 8 is shown as a continuous piece in FIG. 1, multiple weights may be employed either separately or secured together to achieve the same weight balance as required.

[0054] In addition, it will also be appreciated that while the weights in FIGS. 4a to 4d are shown to be located towards the bottom portion of the greater density material 4, the exact location of the weight 8 in the greater density material 4 can be varied so long as the weights are located within the greater density material.

[0055] It is preferred, however, that the weights 8 are located towards the bottom of the greater density material 4 for the most advantageous “bottom heavy” keel effect of the cue.

[0056] As mentioned previously, sports cues can be prepared in a range of different models, as exemplified in but not

limited to the Figures enclosed herewith. For example, one-piece, two-piece, and even three-piece cues are known. Two- and three-piece cues comprise a number of cue sections wherein the sections are joined together using a variety of different mechanisms. Examples of the types of connectors that are available include, for example, a screw type connector, a clip/push on connector, and an offset joint connector, wherein the joint is situated below the longitudinal axis of cue.

[0057] It will be appreciated, however, that other forms of connectors may be employed as the above list of connectors is not exhaustive.

[0058] The sports cue may also be manufactured as a single, twin or four-spliced model. An example of a single spliced cue can be seen in FIGS. 8 and 9, an example of a twin-spliced model is shown in FIG. 7, and an example of a four-splice model is shown in FIG. 6.

[0059] In single spliced cues as illustrated in FIGS. 8 and 9 the majority of the cue comprises a single piece of material 2 such as wood, to which is secured by a suitable attachment means a single splice of material 4 that is of greater density than the material 2 to which it is secured. The splice of denser material is again located below the longitudinal axis of the cue.

[0060] In FIG. 8, the splice of denser material 4 preferably extends for up to two-thirds of the length of the cue, while in FIG. 9 the splice of denser material 4 extends along the cue for only about one-third of the length of the cue.

[0061] In addition, when the splice is elongated, it provides a form of spine or backbone to the cue that provides additional strength and support for the cue.

[0062] It is also possible for a single splice cue to be formed as a one-piece cue or a two or more piece cue by incorporation of the appropriate connections.

[0063] In FIG. 7 there is illustrated a two-piece or twin splice cue 60 in which the cue is manufactured from a piece of material 2 with a splice of more dense material 4 below the longitudinal axis of the cue which in turn is mirrored by a splice of lighter weight or less dense material 62 above the longitudinal axis of the cue. In an alternative example of the two-piece or twin splice cue, the splice comprised of the heavier or greater density material 4 may be elongated along the length of the cue below the longitudinal axis of the cue as illustrated in FIG. 5.

[0064] In FIG. 6 there is illustrated a four splice cue 50, in which the cue is manufactured such that it comprises two splices of heavier or more dense material 4 located below the longitudinal axis of the cue, mirrored by two splices of light-weight or less dense material 64 located above the longitudinal axis of the cue.

[0065] Finally, in FIG. 10 there is illustrated a two-piece pool cue 90 wherein the two pieces 92 and 94 are attached by a suitable mechanism at point 96.

[0066] The rear portion of the pool cue 94 also comprises two parts, a first lower portion 4, located below the longitudinal axis of the cue and within which is located a weight 8 and a second upper portion 98, which is located above the longitudinal axis of the cue.

[0067] In the example of the pool cue illustrated in FIG. 10, it can be seen that the weight 8 extends along a substantial length of the lower portion of the cue, for example, up to 50% of the length of the lower portion of the cue. The weight 8 in FIGS. 1-10 therefore provides a suitable weight bias and keel effect to provide a cue which is “bottom heavy.”

[0068] The “bottom heavy” cue has been found to improve the shot of a player in a variety of ways. The cue sits on the palm of the hand more effectively, encouraging a consistent preparation pattern before the shot is taken. The bias in the cue ensures the heavier side is pulled downwards to facilitate this. Due to the bias, the cue will also sit on the player’s bridge hand more satisfactorily. Furthermore, the cueing up stage of the shot is encouraged to be straighter as a result of the weight bias discouraging any unwanted sideways movements. Similarly, the bias discourages unwanted lateral movement to result in a straighter final back-swing and delivery.

[0069] The weight bias also reduces twisting of the cue during a shot, thus assisting in preventing the cue and cueing arm from moving off-line. This encourages the arm and hand to move more effectively, thereby creating a natural correct stroke through habit. Due to the way in which the biased cue sits in the player’s hand, accuracy is encouraged as the player is able to fine-tune their technique and remember desired movements through “muscle memory.”

[0070] Moreover, the cue encourages a player to cue on a more parallel plane, helping them to get through the ball more efficiently when striking. The player will also be less likely to miss-cue. Playing of rest shots should also be improved using the cue. Any sideways movement or “whip” is reduced as the heavier wood also acts as a stiffener.

[0071] Therefore, in summary, the distribution of weight within the sports cue forces a player to align their wrist arm and stance and hence develop a higher degree of accuracy.

[0072] Furthermore, the weight distribution also prevents rotation of the wrist and arm during use of the cue.

Experimental

[0073] The resistance to rotation of the sports cue according to one embodiment of the present invention was analyzed in comparison to that of a traditional snooker cue.

[0074] Both of the cues tested were one-piece cues of the same overall weight and length. The resistance to rotation of the cues was determined by measuring the weight required to turn the cue through an angle of 90°.

[0075] Identical weights were attached to both cues in the same position on the cues and then the action of both cues was tested on identical surfaces.

[0076] The results of the tests showed that the sports cue of the present invention demonstrated a resistance to rotation of over 100 times greater than that shown by a traditional sports cue.

[0077] That is, for a traditional sports cue, a weight of 1 g was sufficient to force the cue to rotate through an angle of 90°. In contrast, the sports cue of the present invention required 105 g to rotate the cue through an angle of 90°, thereby demonstrating the effect of the “bottom heavy” keel effect of the cue of the present invention.

[0078] Further tests were also carried out to demonstrate the improvement in performance of a cue according to the present invention compared with a traditional sports cue.

[0079] To this end, the performance of 25 players was tested using a traditional cue and a cue according to the present invention wherein both cues were of equal weight and length. It was found that the performance of all 25 players showed significant improvement in the following areas when a cue of the present invention was used such that the players demonstrated:

[0080] straighter cue action,

[0081] improved parallel cue action,

[0082] increased cue power,

[0083] improved body position, and

[0084] a reduction in hand and wrist twisting during play.

[0085] An exemplary embodiment of the present invention therefore provides a cue of conventional size, weight and shape but having a weight bias which serves to improve the technique of the player. Furthermore, the end of the cue which contacts the hand of the player during a stroke is still of softwood which has a preferable feel to hardwood, thereby maintaining the comfortable feel of the cue during play.

[0086] It is to be appreciated that the cue may be provided in two or more parts to provide a cue that may be dissembled for transport and storage purposes.

[0087] While exemplary embodiments incorporating the principles of the present invention have been disclosed hereinabove, the present invention is not limited to the disclosed embodiments. Instead, this application is intended to cover any variations, uses, or adaptations of the invention using its general principles. Further, this application is intended to cover such departures from the present disclosure as come within known or customary practice in the art to which this invention pertains and which fall within the limits of the appended claims.

What is claimed is:

1. A sports cue, comprising:

a tapered rod having a longitudinal axis extending there-through; and

wherein, the weight of the rod above the longitudinal axis is less than the weight of the rod below the longitudinal axis.

2. The sports cue of claim 1, further comprising weights disposed in the lower half of the rod.

3. The sports cue of claim 1, wherein at least a part of the rod comprises a cavity, a heavy weight material being disposed in the cavity below the longitudinal axis and a light weight material being disposed above the longitudinal axis.

4. The sports cue of claim 3, wherein the heavy weight material comprises lead.

5. The sports cue of claim 3, wherein the light weight material comprises foam.

6. The sports cue of claim 1, wherein the rod comprises a heavy material in substantially half of the length of the rod, the heavy material being disposed at a wide end of the rod.

7. A sports cue, comprising:

a tapered body having a longitudinal axis extending there-through; and

wherein, a greater density material is disposed below the axis and a lesser density material is disposed above the axis.

8. The sports cue of claim 7, wherein the body tapers along its length from a wide end to a tip, substantially half of the length of the body comprising the greater density material near the wide end of the body and the tip comprising the lesser density material.

9. The sports cue of claim 7, wherein the greater density material comprises 50%-75% of the length of the body.

10. The sports cue of claim 9, wherein the greater density material comprises 60%-70% of the length of the body.

11. The sports cue of claim 7, wherein the ratio of the densities of the two materials comprises 1.2:1-1.8:1.

12. The sports cue of claim 11, wherein the ratio of the densities comprises 1.5:1-1.7:1.

13. The sports cue of claim 7, wherein the greater density material and lesser density material comprise wood.

14. The sports cue of claim 13, wherein the lesser density material comprises a softwood and the greater density material comprises a hardwood.

15. The sports cue of claim 7, wherein the lesser density material comprises about 670 kg/m^3 and the greater density material comprises about 1120 kg/m^3 .

16. The sports cue of claim 7, wherein the greater density material comprises more than 60% of the total weight of the body.

17. The sports cue of claim 16, wherein the greater density material comprises 65%-75% of the total weight of the body.

18. The sports cue of claim 7, further comprising an additional weight disposed in the body.

19. The sports cue of claim 18, wherein the additional weight is disposed within the portion of the body comprising the greater density material.

20. The sports cue of claim 18, wherein the additional weight is disposed below the longitudinal axis of the body.

21. The sports cue of claim 7, wherein the body comprises at least two removably coupled parts.

22. The sports cue of claim 7, wherein the total weight of the body comprises about 15 oz-20 oz.

23. The sports cue of claim 7, wherein 55%-95% of the total weight of the body is disposed below the longitudinal axis.

24. The sports cue of claim 7, wherein 70%-90% of the total weight of the body is disposed below the longitudinal axis.

25. The sports cue of claim 7, wherein 75%-85% of the total weight of the body is disposed below the longitudinal axis.

26. The sports cue of claim 7, further comprising an extension having a means for attaching to a wider end of the body, the extension including at least two materials of different densities that correspond to the greater density material and lesser density material of the body.

27. An extension for attaching to a sports cue, comprising: a body having a longitudinal axis extending therethrough; a means for attaching the body to the sports cue; and wherein, the weight of the body above the longitudinal axis is less than the weight of the body below the axis.

28. An extension for attaching to a sports cue, comprising: a body having a longitudinal axis extending therethrough; a means for attaching the body to the sports cue; and wherein, the density of the material above the axis is less than the density of the material below the axis.

29. A sports cue training aid, comprising: a rod having a wide end and a narrow end, a longitudinal axis extending through the rod from the wide end to the narrow end; a first portion of the rod including a heavier weight material and a second portion of the rod including a lighter weight material; and wherein, the first portion of the rod is substantially below the axis and the second portion of the rod is substantially above the axis.

30. The sports cue training aid of claim 29, wherein the first portion of the rod is disposed near the wide end.

31. The sports cue training aid of claim 29, wherein the narrow end comprises the lighter weight material.

32. The sports cue training aid of claim 29, wherein the first portion comprises approximately two-thirds of the length of the rod.

33. The sports cue training aid of claim 29, further comprising an additional weight disposed in the first portion of the rod.

34. The sports cue training aid of claim 29, further comprising an extension for coupling to the rod.

35. The sports cue training aid of claim 34, wherein the extension comprises a heavy material and a light material.

36. The sports cue training aid of claim 35, wherein, when the extension is coupled to the rod, the heavy material of the extension is aligned with the heavier weight material of the rod and the light material of the extension is aligned with the lighter weight material of the rod.

37. The sports cue training aid of claim 29, wherein the rod comprises a first piece removably coupled to a second piece, the first piece and second piece including the heavier weight material and lighter weight material.

38. The sports cue training aid of claim 37, wherein, when the first piece is coupled to the second piece, the heavier weight material in the first piece aligns with the heavier weight material in the second piece and the lighter weight material in the first piece aligns with the lighter weight material in the second piece.

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