

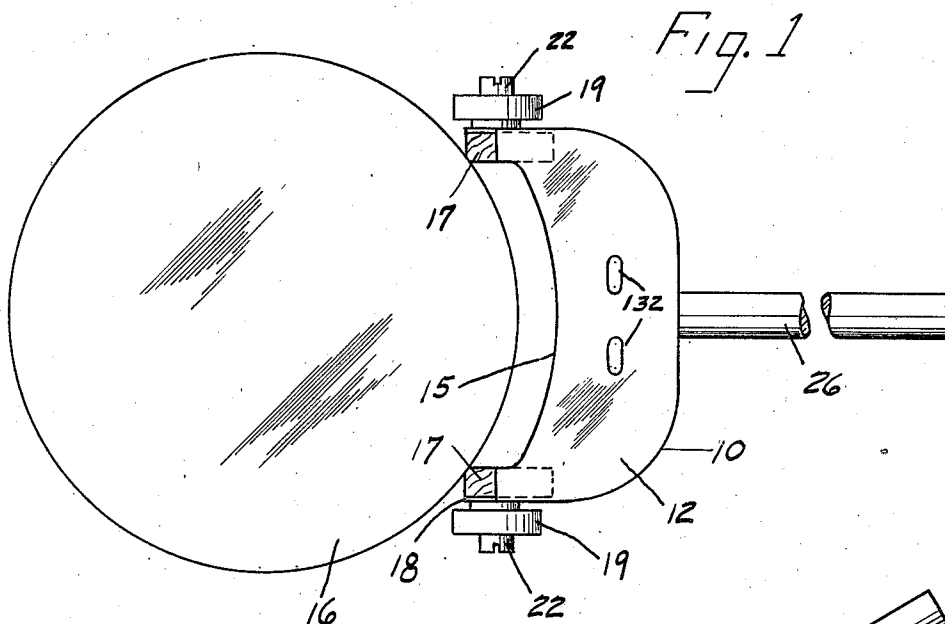
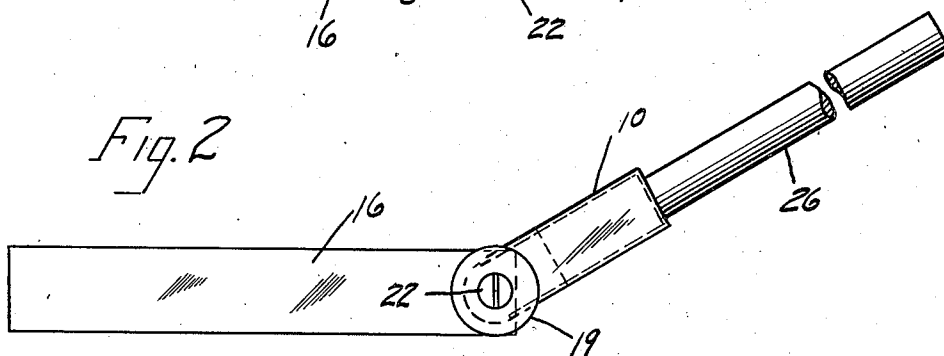
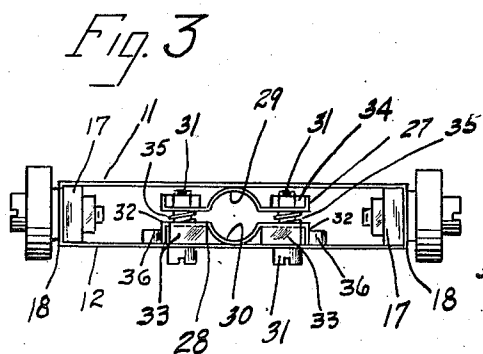
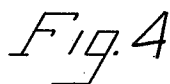
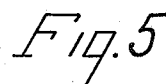
Dec. 30, 1947.

E. J. VON PEIN
HEAD FOR SHUFFLEBOARD CUES

2,433,496

Filed Nov. 6, 1943

2 Sheets-Sheet 1



INVENTOR EDWARD J. VON PEIN
By *Edward J. Von Pein*
ATTORNEY

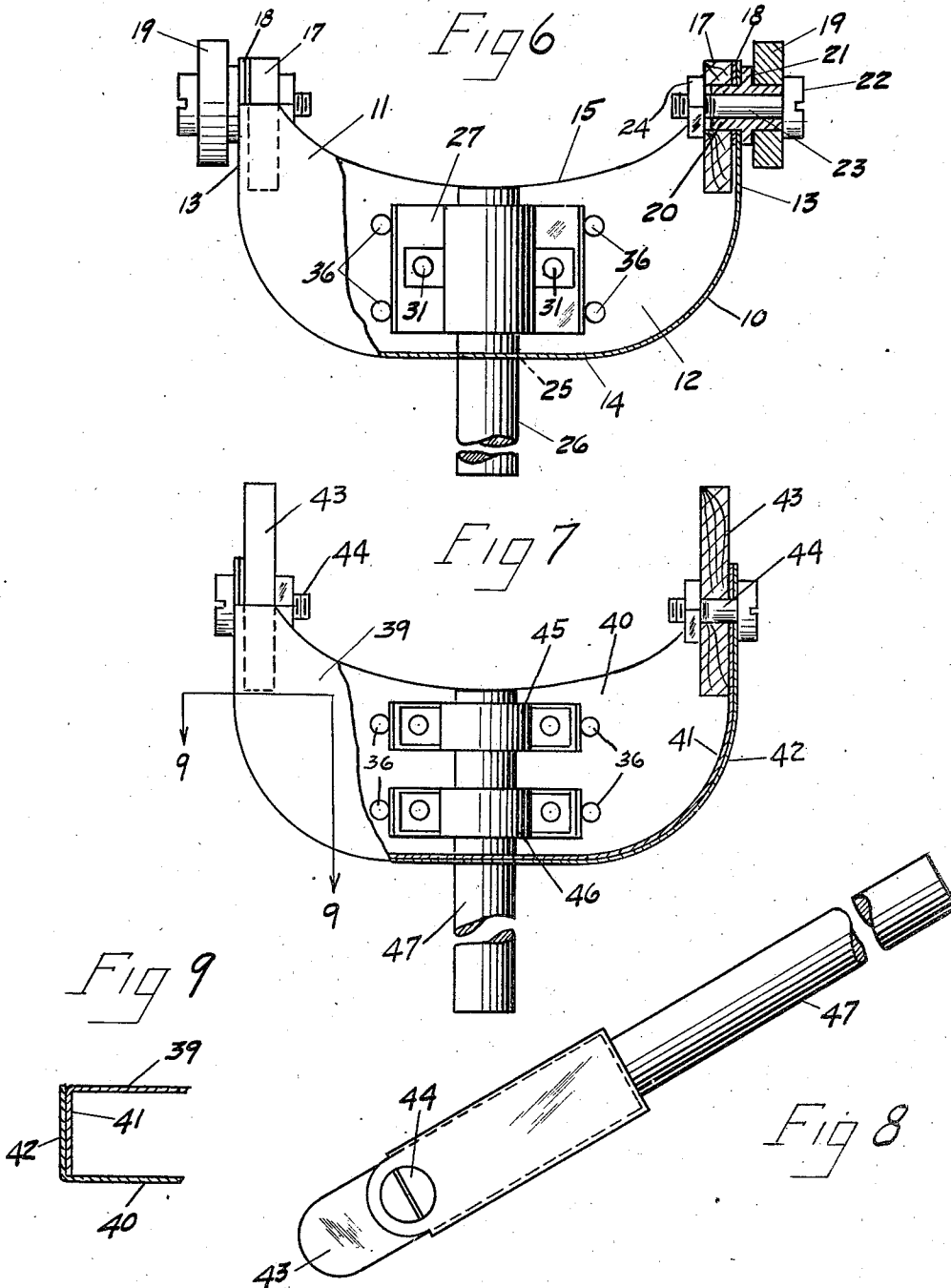
Dec. 30, 1947.

E. J. VON PEIN
HEAD FOR SHUFFLEBOARD CUES

2,433,496

Filed Nov. 6, 1943

2 Sheets-Sheet 2



INVENTOR EDWARD J. VON PEIN
By *Edward J. Von Pein*
ATTORNEY

UNITED STATES PATENT OFFICE

2,433,496

HEAD FOR SHUFFLEBOARD CUES

Edward J. Von Pein, Dayton, Ohio

Application November 6, 1943, Serial No. 509,207

22 Claims. (Cl. 273-129)

1

This invention relates to a cue head and is designed more particularly for use on a cue of the type used in playing the game of shuffleboard.

The game of shuffleboard is played on a long narrow court having adjacent each end thereof a score diagram which is divided into sections of different values. The game is played by sliding disks from one end of the court toward the scoring diagram at the other end of the court, this being done by means of a cue and the purpose being to locate the disk on a high value section of the scoring diagram. The cue comprises a handle or rod, usually about six feet long, and a head having laterally spaced contact parts to engage the peripheral edge of the disk and thus enable the player to propel the disk and more or less accurately control the direction of its movement. In the standard cue the head comprises a block of wood rigidly secured to the handle and having in its forward edge a recess at the lateral edges of which are arranged forwardly projecting contact parts to engage the disks. These contact parts support the cue head upon the surface of the court and have a frictional contact therewith which subjects the contact part of the head to severe wear, as well as offering substantial frictional resistance to the movement of the cue head over the surface of the court, the court being usually formed of concrete. As a result the contact parts of the head wear away and the cue becomes useless. It has been proposed to form the cue heads of metal but the rules of the game require that no metallic part of the cue shall be in contact with the surface of the court and therefore the head must be provided with contact blocks of wood or other non-metallic material, which contact with the court surface and wear away in the same manner as they do in the wooden head. The solid metallic head is objectionable due to its weight which makes the cue more difficult to manipulate.

Usually the cue head is provided in its rear edge with an opening to receive the end portion of the handle which is then cemented or otherwise secured within the socket. In order that the handle may be properly secured to the socket the end portion thereof may be of a size and shape to fit snugly within the socket. It requires considerable skill to so shape the end of the handle.

One object of the invention is to provide a cue head which is of light weight, of a strong durable construction and inexpensive to manufacture.

A further object of the invention is to provide a cue head which is easy to manipulate and moves

2

freely over the surface of the court with a minimum of friction.

A further object of the invention is to provide a cue head in which the contact cue parts are supported out of engagement with the surface of the court and are subject to very little wear.

A further object of the invention is to provide a cue head with means whereby a handle may be easily attached thereto and removed therefrom, and which does not require the end portion of a handle to be of an exact size and shape.

A further object of the invention is to provide a cue head in which the handle attaching device may be easily changed to accommodate handles having end portions of substantially different sizes.

Other objects of the invention may appear as the cue head is described in detail.

In the accompanying drawings Fig. 1 is a plan view of a cue, with a handle partly broken away and the head in contact with a disk; Fig. 2 is a side elevation of the cue and disk shown in Fig. 1; Fig. 3 is a front elevation of the cue head of Fig. 1; Figs. 4 and 5 are front elevations of a portion of a cue head showing the same equipped with handle attaching devices of different sizes; Fig. 6 is a plan view of the cue head, partly in section and with the handle partly broken away; Fig. 7 is a view similar to Fig. 6 of a modified form of the cue head; Fig. 8 is a side elevation of the cue head of Fig. 7; and Fig. 9 is a section taken through a portion of the cue head on the line 9-9 of Fig. 7.

In these drawings I have illustrated certain embodiments of my invention but I wish it to be understood that these embodiments have been chosen for the purpose of illustration only and that the cue head as a whole, as well as the several parts thereof, may take various forms without departing from the spirit of the invention.

The cue head may be formed of any suitable material having sufficient strength, such as metal or plastic material, and is so constructed as to impart substantial rigidity thereto and at the same time provide a cue head of very light weight. This is preferably accomplished by making the cue head hollow, and, as shown in Figs. 1 to 6 the head comprises upper and lower members 11 and 12 which are of similar shape and are connected one to the other by side walls 13 and a rear wall 14. In the present instance the side and rear walls are continuous but this is not essential. The forward edges of the upper and lower walls are preferably recessed, as shown at 15, to extend

3

about a portion of the disk, 16, which is to be propelled over the surface of the court. This hollow body may be formed in one or more pieces and in the form shown in Figs. 3 to 6 it is formed in one piece, as by casting or drawing metal or by molding or otherwise forming the same of plastic or other suitable material. The construction of the body is such that the walls thereof are rigidly braced one against the other and the walls may therefore be made very thin and still have ample strength for their intended purpose. Secured to the forward portion of the body are laterally spaced and forwardly extending contact blocks 17, the rear portions of which preferably extend between the upper and lower members of the body and fit snugly between the same and may be secured to the body in any suitable manner. Preferably the side walls of the body project forwardly beyond the adjacent portions of the upper and lower walls, as shown at 18, and the contact blocks may terminate adjacent the forward ends of the parts 18 of the side walls or may project beyond the side walls. In either arrangement the inner upright corners thereof contact with the peripheral edge of the disk 16, as shown in Fig. 1.

The body portion of the head has no contact with the court and it is preferably provided with anti-friction devices, such as rollers, for supporting the same above the surface of the court and enabling the same to move freely over the court and to be easily manipulated. These rollers are preferably so arranged that they not only support the body out of engagement with the court but also support the contact blocks 17 out of engagement with the court. In the arrangement here illustrated two rollers 19 are mounted at the respective sides of the head and are so arranged that they will support both the head and the contact blocks out of engagement with the court when the cue is in its operative or inclined position, as shown in Fig. 2. The rollers may be mounted on the head in any suitable manner and, in the arrangement here shown, they are connected with the head by the same devices which connect the contact block 17 with the head. Each of these connecting devices comprises a tubular element 20 the inner portion of which extends through openings in the adjacent side wall 13 and contact block 17. The tubular element is provided between its ends with a flange 21 which engages the outer surface of the side wall to limit the inward movement of the tubular element and the roller 19 is rotatably mounted on the outer portion of the tubular element. The roller is retained on the tubular element by the head 22 of a bolt 23 which extends through the tubular element and is provided at its inner end with a nut 24 by means of which the contact block is clamped firmly to the side wall of the body. The length of that portion of the tubular element between the flange 21 and the outer end thereof is such as to permit of the free rotation of the roller without permitting axial movement or wobbling.

The body is provided in its rear wall 14 with an opening through which the end portion of the handle or rod 26 may be inserted and an attaching device is arranged within the hollow body to receive the end of the handle and firmly secure the same to the head. This attaching device preferably comprises cooperating clamping members or plates 27 and 28. As shown in Fig. 3 the clamping member 28 is the lower clamping member but it will be understood that the cue may

4

be operated with equal ease with either side of the head uppermost. The clamping members are provided between their lateral edges with opposed recesses 29 and 30 and the lateral portions of each member are provided with apertures to receive bolts 31 which extend through openings 132 in the member 12 of the body, which is the lower member in Fig. 3 and the upper member in Fig. 1. The lower member 28 has its lateral edge portions 32 turned downwardly into supporting engagement with the wall of the body and may also, if desired, have lugs 33 turned downwardly into engagement with said wall at the opposite ends of each lateral portion of the clamping member. In this manner the lower clamping member is supported in a firm position on the lower wall of the body and is held against tilting movement. The nuts 34 or the bolts 31 engage the upper surface of the upper clamping member 27 and press the same toward the lower member to clamp the end portion of the handle between the recessed portions of the two clamping members. Springs 35 are interposed between the members 27 and 28 to separate the same when the bolts are loosened. It will be apparent that the relative movement of the two clamping members is such that the recessed portions thereof may receive and clamp handles of somewhat different diameters. In the present instance, the clamping device of Fig. 3 is intended for a rod five-eighths of an inch in diameter but the diameter may vary at least a sixteenth of an inch in either direction. Further, it is not necessary that the end portion of the handle should conform exactly to the contour of the recesses or that it should completely fill all parts of the opposed recesses. For example, a bamboo rod, which has a flat surface at one side thereof, can be securely clamped between the members 27 and 28. However, the range of diameters which can be received in one clamping device is limited and in order to enable handles of materially different diameters to be attached to any given head the clamping devices are provided in different sizes and are removable so that a clamp of the desired diameter may be attached to any head. Thus a head can be shipped or delivered to a customer with, say, three clamping devices of different sizes and the customer may use that clamping device which fits the handle which he has or which he may secure. Due to the changes in the sizes of the recesses the bolt openings of the clamping members are spaced different distances from the center of the opposed recesses and therefore the openings 132 in the wall 12 of the body are elongated to permit a shifting of the bolts. It is desirable that the clamping device, whatever its size, should be accurately centered with relation to the head. Therefore the overall width of the lower clamping member 28 is the same in all sizes of clamps and the wall 12 of the body is provided with abutments, such as studs 36, on opposite sides of and spaced equal distances from the fore and aft center line of the body. In the larger clamp of Fig. 3 the outwardly turned edge portion 32 is straight and the lateral surfaces thereof contact directly with the abutments 36 so as to accurately position the clamp. In the smaller sizes, as shown in Figs. 4 and 5, the downturned portions 32a of the lower member 28a are spaced a shorter distance from the center line than are the parts 32 of the member 28 in Fig. 3. Therefore each part 32a is provided with a laterally extending flange 37 to contact the abutments 36, thus again centering the clamp with relation to the body.

In Figs. 7, 8 and 9, is shown a slightly modified form of the head in which the body is formed in two pieces instead of one piece, the upper and lower walls 39 and 40 being pressed or otherwise formed to provide the same respectively with flanges 41 and 42 arranged in overlapping or telescoping relation one to the other and constituting the side and rear walls of the head. The forward portions of these flanges are rigidly connected one with the other by the attaching devices for the contact blocks, to be presently described, and I have not found it necessary to attach the flanges or two parts of the body at other points, although this may be done if desired, as by soldering or spot welding. The contact blocks 43 have their rear portions mounted between the upper walls 39 and 40 of the body, are rigidly secured to the respective side walls by bolts 44 and project a substantial distance beyond the forward ends of the side walls, thus when the handle is supported in an operative or inclined position, as shown in Fig. 8, the contact blocks rest upon the surface of the court and slide over the same, the upper and lower corners being preferably rounded to provide smooth contact when the head is operated with either side upmost. The inner corners of the blocks contact the disk in substantially the same manner shown in Fig. 1. This construction permits the contact blocks to be easily removed and replaced when worn or damaged. The handle attaching means is similar to that above described except that it comprises two pairs of clamping members 45 and 46 instead of a single pair, as shown in Figs. 1 to 6. These clamping devices engage the end portion of the handle 47 in the manner above described and are interchangeable in the same manner. The positioning abutments 36 are arranged exactly as they are shown in Figs. 3 to 6, so that either the single or double clamp may be used in either head.

While I have shown and described certain embodiments of my invention I wish it to be understood that I do not desire to be limited to the details thereof as various modifications may occur to a person skilled in the art.

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

1. A head for a cue comprising a body including upper and lower members spaced one from the other and side and rear walls connecting said members one with the other, said rear wall having an opening to receive a handle, means between said upper and lower members to secure said handle to said head, disk engaging contact blocks supported between the forward portions of said members, and means for rigidly securing said blocks to said body.

2. A head for a cue comprising a body including upper and lower members spaced one from the other and side and rear walls connecting said members one with the other, said rear wall having an opening to receive a handle, means between said upper and lower members to secure said handle to said head, disk engaging contact blocks supported between the forward portions of said members, and attaching devices extending through said side walls and the respective blocks for rigidly and detachably securing said blocks to said body.

3. A head for a cue comprising a body including upper and lower members rigidly connected one with the other in spaced relation and having rigid therewith laterally spaced disk engaging

contact members, clamping members arranged between said upper and lower members and having opposed portions to receive between them the end portion of a handle, at least one of said clamping members being movable with relation to the other clamping member and means for securing said clamping members to said body and for moving one of said clamping members toward the other to tightly grip said handle between the two clamping members.

4. A head for a cue comprising a body having adjacent the forward edge thereof laterally spaced disk engaging contact parts and also having abutments on opposite sides of and spaced equal distances from a center line extending between said contact parts, and a handle attaching device including two members having opposed recesses to receive an end portion of said handle, one of said members having parts extending laterally equal distances beyond the respective sides of the recess therein and engaging the respective abutments to center said recess with relation to said contact parts, and means for detachably securing said member to said body and for holding the other member in clamping engagement with the handle in said recesses.

5. A head for a cue comprising a body including upper and lower members rigidly connected one to the other in spaced relation and having rigid therewith laterally spaced disk engaging contact members, a handle attaching device arranged between said upper and lower members and including two clamping members having opposed recesses between and spaced from the lateral edges of the respective clamping members and adapted to receive the end portion of a handle, one of said clamping members having parts in supporting engagement with the adjacent member of said body, and means for detachably securing said clamping member to said body and for holding the other clamping member in clamping engagement with said handle.

6. A head for a cue comprising a body including upper and lower members rigidly connected one to the other in spaced relation and having rigid therewith laterally spaced disk engaging contact members, a handle attaching device arranged between said upper and lower members and including two clamping members having opposed recesses between and spaced from the lateral edges of the respective clamping members and adapted to receive the end portion of a handle, one of said clamping members having parts in supporting engagement with the adjacent member of said body, and bolts extending through said body member and through the lateral portions of both clamping members.

7. A head for a cue comprising a body including upper and lower members rigidly connected one to the other in spaced relation and having rigid therewith laterally spaced disk engaging contact members, one of said body members having on its inner surface abutments arranged on opposite sides of and spaced equal distances from the fore and aft center line of said body, a handle attaching device arranged between said body members and including two clamping members having opposed recesses between and spaced from the lateral edges of the respective clamping members, one of said clamping members having its lateral edges spaced equal distances from its recess and engaging said abutments to accurately position said clamping member with relation to said body, and means for detachably securing said clamping member to said body and for drawing the other

clamping member toward the first mentioned clamping member.

8. A head for a cue comprising a body including upper and lower members rigidly connected one to the other in spaced relation and having rigid therewith laterally spaced disk engaging contact members, one of said body members having on its inner surface abutments arranged on opposite sides of and spaced equal distances from the fore and aft center line of said body, a handle attaching device arranged between said body members and including two clamping members having opposed recesses between and spaced from the lateral edges of the respective clamping members, one of said clamping members having its lateral edges spaced equal distances from its recess and engaging said abutments to accurately position said clamping member with relation to said body, said body member and said clamping members having aligned openings on both sides of said recesses, and bolts extending through said openings, the openings in said body member being elongated transversely to said recesses.

9. A head for a cue comprising a body including upper and lower members rigidly connected one to the other in spaced relation and having rigid therewith laterally spaced disk engaging contact members, one of said body members having on its inner surface abutments arranged on opposite sides of and spaced equal distances from the fore and aft center line of said body, a handle attaching device supported between said body members and including superposed plates having opposed recesses spaced from the lateral edges thereof, the lateral portions of one of said plates having outwardly turned parts in supporting engagement with said body member and having portions spaced equal distances from its said recess and engaging the respective abutments to position said attaching device with relation to said body, and means for securing said plate to said body member and for movably connecting the other plate therewith.

10. A head for a cue comprising a body having a forwardly extending part at each side thereof, a disk engaging contact block on the inner side of each forwardly extending part, a roller on the outer side of said part, a device extending through said part and having means for securing said contact block thereto and for rotatably connecting said roller therewith, and means for attaching a handle to said body.

11. A head for a cue comprising a body having a forwardly extending part at each side thereof, a tubular element extending through each forwardly extending part, a disk engaging contact block mounted on one end of said tubular element, a roller mounted on the other end of said tubular element, a bolt extending through said tubular element to retain the same in said part of said body and to secure said contact block and said roller thereon, and means for connecting a handle with said body.

12. A head for a cue comprising a hollow body of relatively thin material having upper and lower walls and side walls connecting the lateral edges of said walls and projecting forwardly beyond the intermediate portions of the same, and disk engaging contact blocks confined between and extending forwardly beyond said upper and lower walls adjacent the respective side walls, means for securing said contact blocks to said side walls, and means whereby a handle may be connected with said body.

13. A head for a shuffleboard cue comprising a

body having adjacent its forward edge laterally spaced contact parts to engage the peripheral edge of a disk and also having means whereby a handle may be connected therewith, and supporting elements arranged to support said body in an operative position with said contact parts out of engagement with the surface on which said supporting elements rest, said body being connected with said supporting elements for movement about a horizontal axis adjacent the forward ends of said contact parts, whereby the movement of said body about said axis will impart a relatively small vertical movement to said ends of said contact parts.

14. A head for a shuffleboard cue comprising a body having adjacent its forward edge laterally spaced contact parts to engage the peripheral edge of a disk and also having means whereby a handle may be connected therewith, and rollers having supporting connection with said body on opposite sides of the fore and aft center line thereof to movably support said body with said contact parts out of engagement with the surface of the court when said head is in an operative inclined position, the forward ends of said contact parts being spaced from the axis of said rollers a distance less than the radii of said rollers.

15. A head for a cue comprising a body adapted for movement on a supporting surface and having forwardly extending laterally spaced contact parts to engage a disk resting on said surface in front of said body, and rollers connected with said body and arranged to movably support said body on said surface with said contact parts out of engagement with the surface over which said rollers are moved in all operative positions of said head, said body having means whereby a handle may be connected therewith.

16. A head for a cue comprising a body having means whereby a handle may be connected therewith and also having forwardly projecting disk engaging contact parts adjacent the respective lateral edges thereof, and rollers having supporting connection with said body adjacent the respective contact parts and arranged to support said body with said contact parts out of engagement with the surface over which said rollers move in all operative positions of said head when said cue is operated with either surface of said body uppermost.

17. In a head for a cue, a body comprising relatively thin light weight members arranged one above the other and rigidly connected one to the other, said body having forwardly projecting lateral portions, each forwardly projecting portion having opposed parts spaced one from the other, disk engaging contact members supported between said opposed parts of the respective forwardly projecting portions and rigidly secured to the latter, said head also having means whereby a rearwardly extending handle may be connected therewith, and rollers mounted on said forwardly projecting portions to movably support said body and so arranged with relation to said contact members that they will support the latter out of engagement with the surface on which said rollers move in all operative positions of said head.

18. In a head for a cue, a body comprising relatively thin light weight members arranged one above the other and rigidly connected one to the other, said body having forwardly projecting lateral portions each including a substantially vertical wall, disk engaging contact members rigidly secured to the vertical walls of the respective forwardly projecting portions, said body also having

means whereby a rearwardly extending handle may be connected therewith, and rollers mounted on said vertical walls on a common axis spaced from the forward ends of said contact members a distance less than the radii of said rollers.

19. A head for a cue comprising a one piece hollow body including spaced upper and lower walls and side and rear walls, disk engaging contact blocks confined between said upper and lower walls adjacent the respective side walls and extending forwardly beyond the intermediate portions of said upper and lower walls, attaching devices for securing said contact blocks to said side walls and means including an opening in said rear wall for attaching a handle to said body.

20. In a head for a shuffleboard cue, a body comprising upper and lower members of sheet-like material arranged one above the other in spaced relation, rigidly connected one with the other and adapted to receive between them the end of a handle, said body having its greatest dimension transverse to the line of movement of said cue, having an intermediate portion of substantial fore and aft width and also having lateral portions projecting forwardly beyond said intermediate portion, said lateral portions having adjacent their forward ends means whereby disk engaging contact members may be connected therewith.

21. In a head for a shuffleboard cue, a body comprising upper and lower members of sheet-like material arranged one above the other in spaced relation and rigidly connected one with the other in said spaced relation, said body having forwardly extending lateral portions, said

members having at the forward end of each forwardly extending portion opposed parts spaced one from the other, and a disk engaging contact member mounted between said opposed parts.

22. A head for a shuffleboard cue comprising a body adapted for movement on a supporting surface and having a forwardly extending part at each side thereof, said parts being arranged to receive between them a portion of a disk resting loosely on said surface and each having an opening therethrough, an elongate element extending through and projecting laterally beyond the inner and outer sides of each forwardly extending part, a disk contacting member mounted on the inner portion of said elongate element, and a surface engaging roller mounted on the outer portion of said elongate element, said rollers constituting the sole support for said body when said cue is in use.

EDWARD J. VON PEIN.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
493,483	Cook	Mar. 14, 1893
634,963	Smith	Oct. 17, 1899
744,460	Battle	Nov. 17, 1903
983,710	Haughland	Feb. 7, 1911
1,959,825	Hess	May 22, 1934
1,966,702	Barstad	July 17, 1934
2,239,391	Krause	Apr. 22, 1941
2,280,331	Whittle	Apr. 21, 1942
2,263,602	Whittle	Nov. 25, 1941