April 10, 1934. H. M. SEAGERS 1,953,992

DEVICE FOR MARKING GOLF BALLS

Filed Jan. 20, 1931 4 Sheets-Sheet 1

Fig. 1.

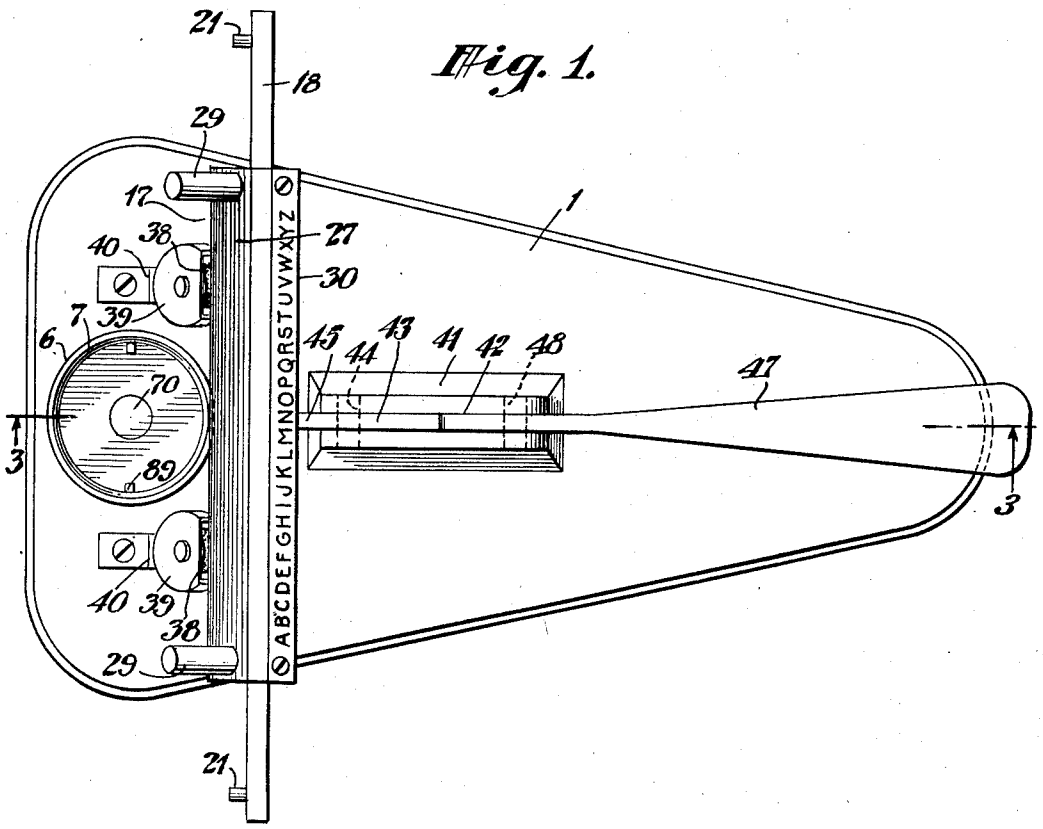
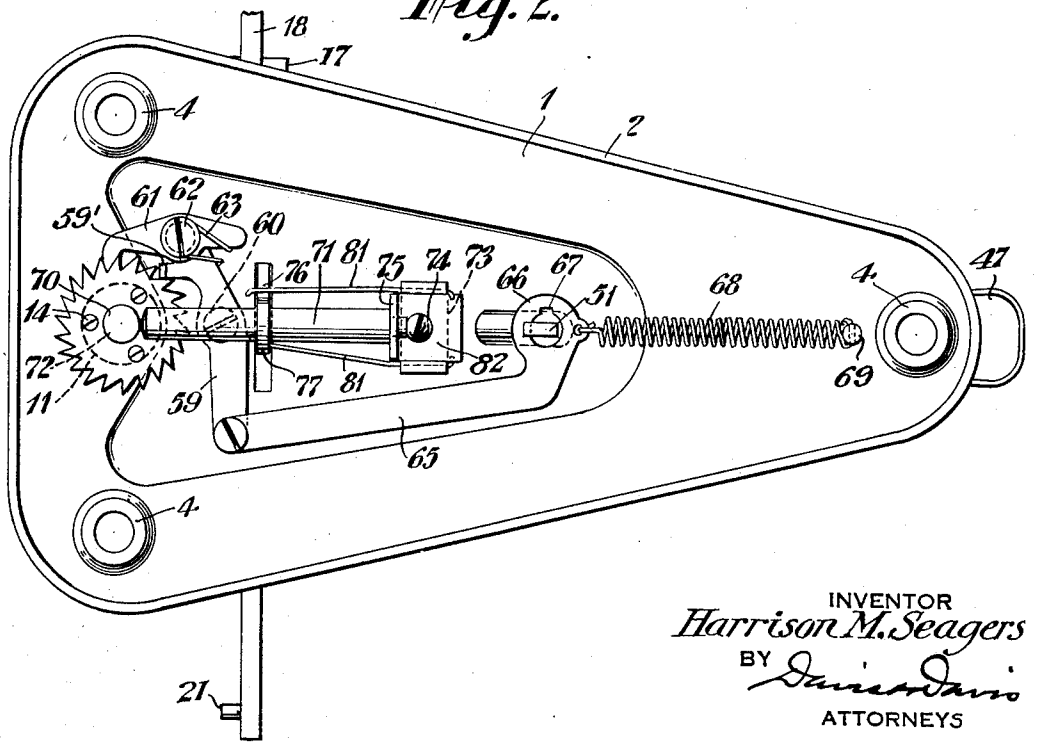


Fig. 2.



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Fig. 3.

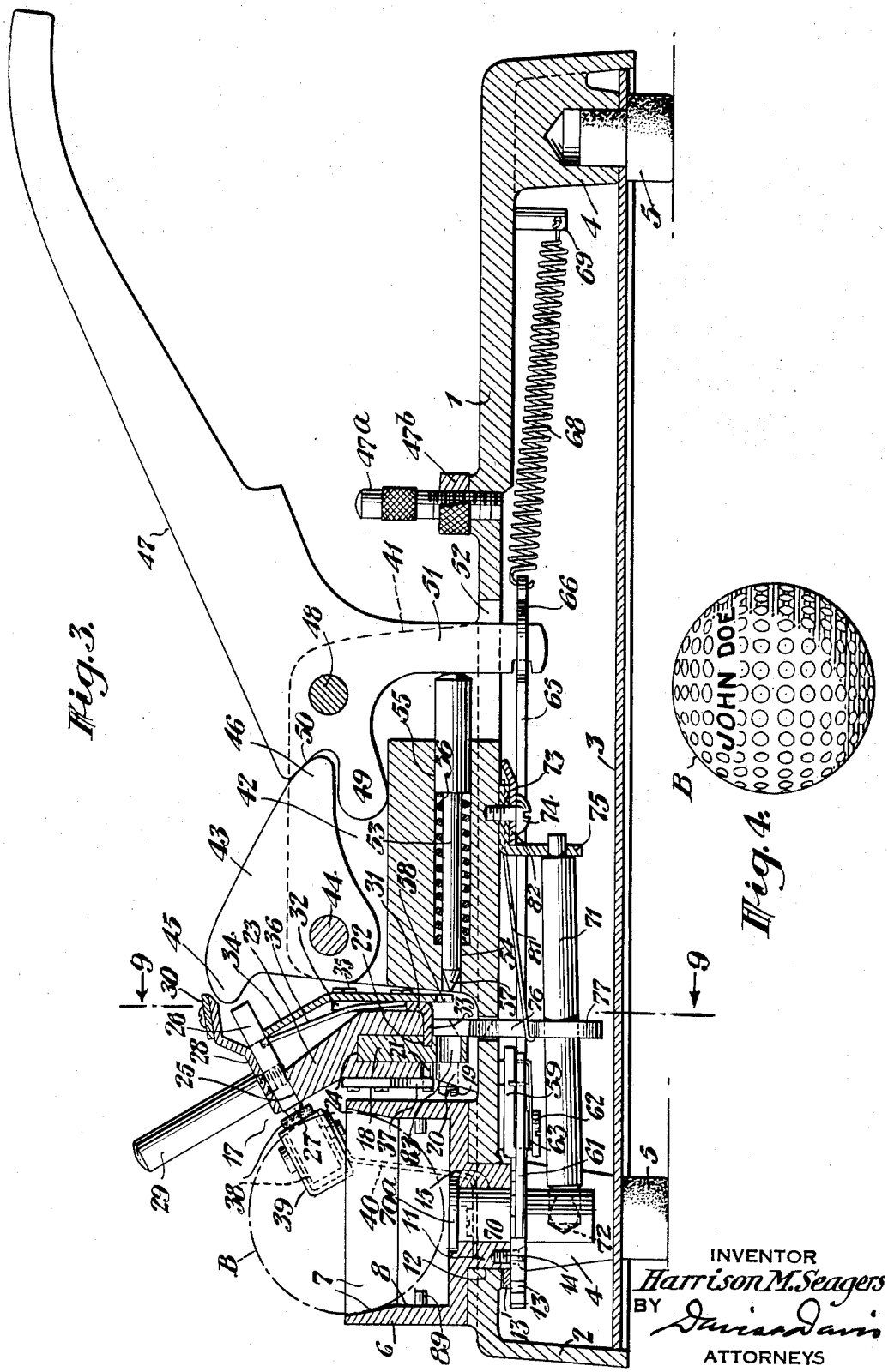


Fig. 4.

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DEVICE FOR MARKING GOLF BALLS

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Fig. 5.

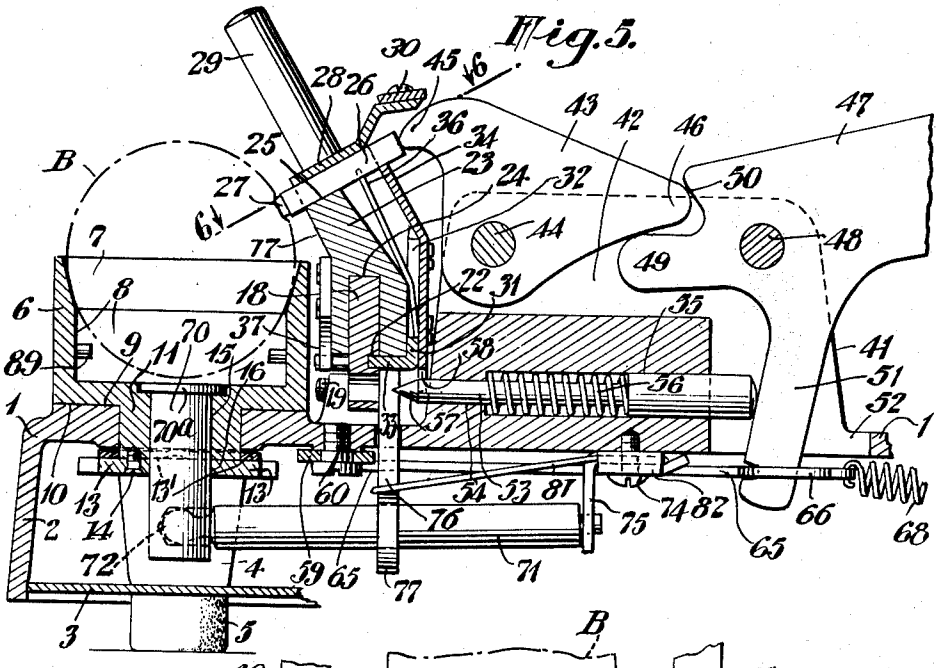


Fig. 6.

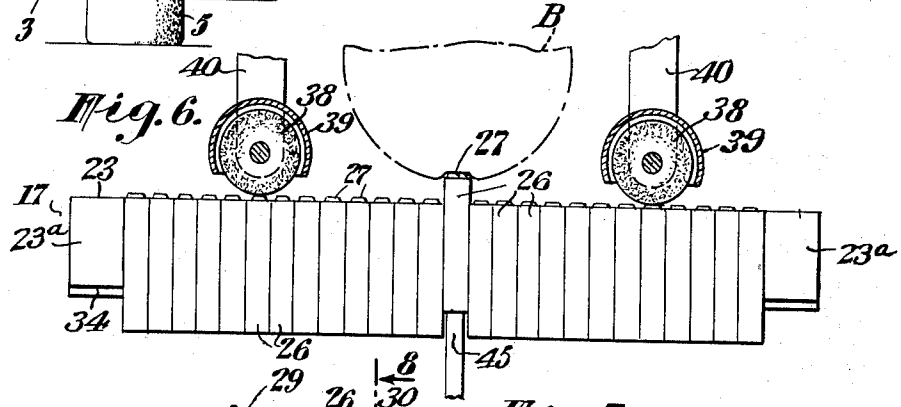
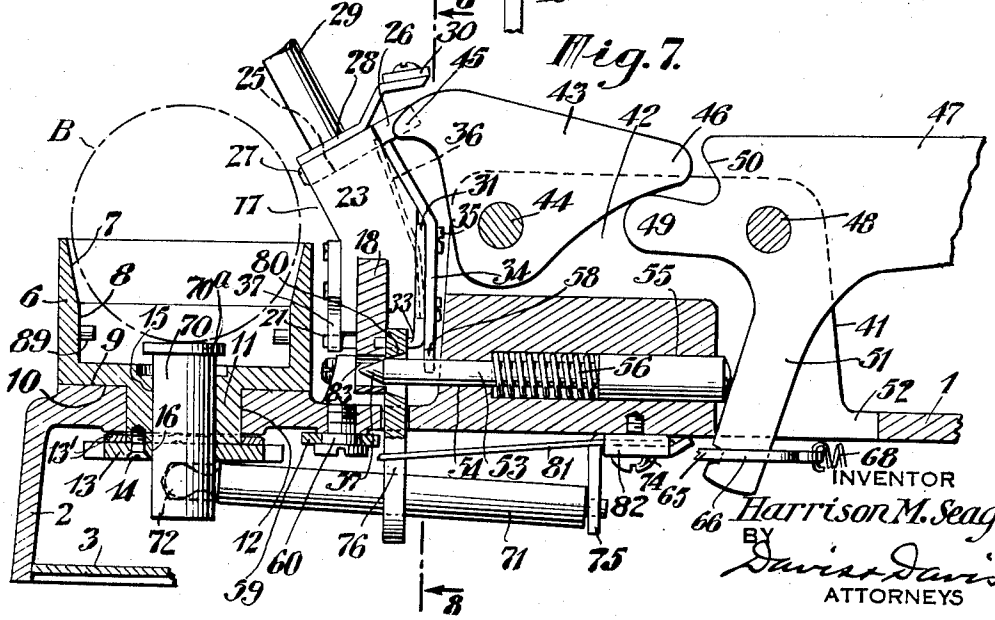


Fig. 7.



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DEVICE FOR MARKING GOLF BALLS

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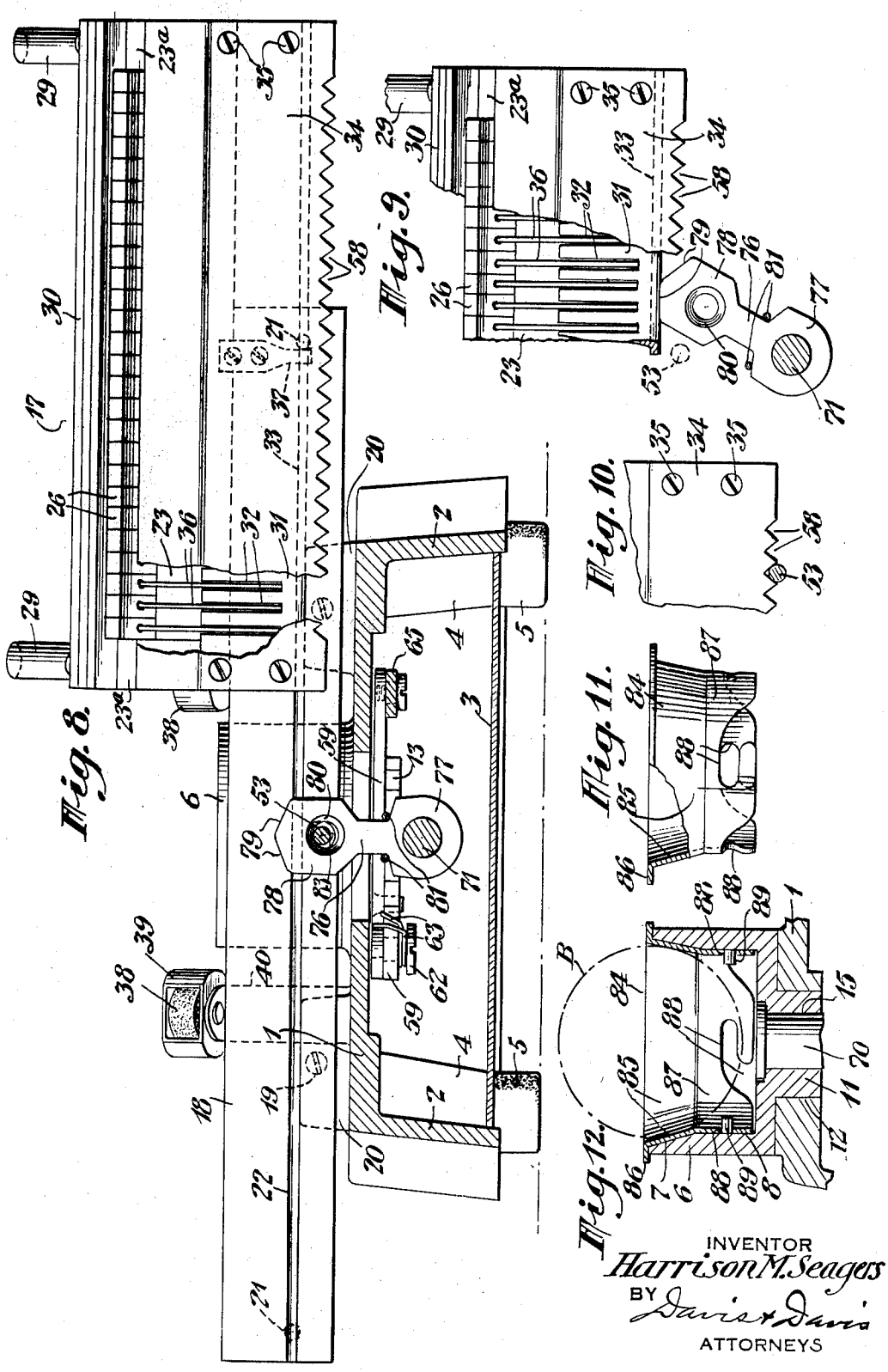


Fig. 8.

Fig. 9.

Fig. 10.

Fig. 11.

Fig. 12.

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Patented Apr. 10, 1934

1,953,992

UNITED STATES PATENT OFFICE

1,953,992

DEVICE FOR MARKING GOLF BALLS

Harrison M. Seagers, Geneva, N. Y., assignor to Hulse Manufacturing Company, Geneva, N. Y., a corporation of New York

Application January 20, 1931, Serial No. 509,926

27 Claims. (Cl. 197—6.2)

Important objects of the present invention are, to provide a generally improved device for applying identification marks to game balls; to provide a device for printing upon golf balls the names of the owners neatly, legibly and ineffaceably; to provide such a device which will be easy to operate; to provide such a device embodying improved mechanical features rendering the device accurate, reliable and durable; to provide such a device embodying a printing mechanism and cooperating means of improved design for supporting a ball to receive printed impressions, and for rotating the ball to properly space the impressions thereon; to provide for convenient performance of the printing operations and the character-spacing rotation of the ball by simple operations of a single manually operable means; to provide for convenient removal of the ball from its support by an operation of said manually operable means; and to embody said features in a simple, compact, durable unit. Other objects of the invention will appear hereinafter.

In the drawings, Fig. 1 is a top plan view of the ball-marking device;

Fig. 2 a bottom plan view with the bottom plate removed disclosing the mechanism in the base of the device;

Fig. 3 a vertical longitudinal sectional view of the device, upon a larger scale, taken on the line 3—3 of Fig. 1;

Fig. 4 a view of a golf ball with an identifying name printed upon it;

Fig. 5 a vertical longitudinal section taken through a portion of the device showing a printing operation thereof;

Fig. 6 a detail section taken on the line 6—6 of Fig. 5;

Fig. 7 a view similar to Fig. 5 showing an operation of the device to dislodge a ball from its holder;

Fig. 8 a transverse section taken on the line 8—8 of Fig. 7;

Fig. 9 a detail section taken on the line 9—9 of Fig. 3;

Fig. 10 a detail sectional view showing the engagement of the type-centering and locking pin with the carriage;

Fig. 11 a side view of an adapter ring designed to be fitted into the ball holder to form a seat for accommodating and holding a smaller ball; and

Fig. 12 a sectional view showing the adapter ring mounted in the ball holder.

The device includes a base upon which a ball holder is mounted at a fixed point for rotation. A type carriage is mounted upon the base for lateral shifting past the ball holder to position any selected one of a row of type at a fixed printing point opposite a ball supported and frictionally held by the holder. A positioned type is projected against the ball by manually operable means also mounted upon the base. At the under side of the base is a mechanism for rotating the ball holder to space the printed impressions upon the ball, and a mechanism for dislodging the ball from the holder. Both of these mechanisms are operated by the manually operable means which effect the printing.

The base is a substantially flat, elongated casting 1 formed with a depending flange 2 extending entirely around it and defining a space for the character-spacing and ball-dislodging mechanisms. This under space is closed by a bottom plate 3 which fits into the flange and bears against bosses 4 formed upon the under side of the base. These bosses form sockets which register with apertures in the bottom plate. A plurality of rubber feet 5 for supporting the device have reduced shanks which are passed through said registering apertures and sockets and are frictionally engaged in the latter to releasably hold the bottom plate in place.

Mounted upon the base, near what may be termed the front end thereof, is the ball holder 6. The latter is of cup-like form and has a frustoconical inner wall forming an annular, downwardly tapering ball seat 7 immediately below the upper edge of the cup. Below said seat the interior of the cup is cylindrical, as at 8. At its under side the cup has a flat face 9 which bears against a flat, relieved seat 10 formed upon the base. A downwardly projecting, cylindrical boss 11 is formed centrally upon the under side of the cup and forms a journal which is rotatably fitted in a bearing bore 12 in the relieved seat 10. At the under side of the base a ratchet wheel 13 is detachably fastened to the boss 11 by screws 14. The boss is formed with a vertical central bore 15 opening into the cup, and the ratchet wheel has an aperture 16 registering with said bore to accommodate part of the ball-dislodging means to be described hereinafter. The ratchet wheel forms part of the character-spacing mechanism also described hereinafter. A spring washer 13′ is interposed between the ratchet wheel 13 and the base to offer a slight frictional resistance to the turning of the ratchet wheel and the ball holder.

In plan the base is wider at its front end, its sides converging toward the rear, and the ball

holder 6 is centrally located upon the wider end. To the rear of the ball holder is the printing mechanism which includes a type carriage 17. For shiftably supporting said carriage, a straight, flat bar 18 is disposed cross-wise of the base directly back of the ball holder and rigidly held in a horizontal position by screws 19 which fasten it to two spaced ears 20 formed upon the base near the opposite side edges of the latter. The bar extends materially beyond the opposite sides of the base and near each end it has a forwardly projecting carriage stop pin 21. In its rear face the bar has a straight groove 22 extending the entire length of the bar.

The carriage comprises an elongated metal block 23 forming the carriage body and having a deep groove 24 along its under side formed to slidably fit the bar 18. The block is angular in cross section, its grooved lower portion being vertical and its upper portion inclining forward toward the ball holder. Along its upper edge said inclined portion has a flat face 25 which inclines forward and downward approximately toward the center of a ball supported by the holder. Supported upon the face 25 is a row of type members 26 each comprising a straight bar extending fore and aft transversely of the carriage and formed with a character type 27 at its forward end. In the present instance there are twenty-six type members bearing the letters of the alphabet in type and disposed side to side along the carriage for independent fore-and-aft shifting. At its opposite ends the block 23 is extended above the face 25 to form retaining projections 23^a engaging the ends of the row of type members. A cover plate 28 is disposed over the row of type members to guide them and retain them upon the supporting face 25 and is detachably fastened at its ends to the body of the carriage by carriage-shifting handle members 29. Each of the latter has a reduced threaded end which is passed through an aperture in the cover plate and screwed into a threaded aperture in the carriage body. The plate is bent to form an elevated rear margin upon which is mounted an index strip 30 bearing the letters of the alphabet arranged correspondingly to the type letters and directly over the appropriate type members.

Mounted upon the rear face of the carriage body is a plate 31 slotted as at 32 to form an upwardly directed comb and having its lower margin bent forward to form a flange 33 slidably fitted in the groove 21 of the carriage-supporting bar 18. Thereby, the carriage is retained upon the bar. A rear cover plate 34 covers the comb portion of plate 31 and both plates are detachably fastened to the carriage body by screws 35. Plate 34 has its upper edge in contact with the under side of the row of type members. Fitted and retained in the slots 30 are wire springs 36 which extend upward and forward from the comb and into cavities in the under sides of the type members. These springs are bent and under tension and tend to straighten and retract the type members to normal position. Rearward movement of the type members is limited by contact of the springs with the upper edge of plate 34. A stop 37 centrally located upon the front of the carriage is adapted to contact the fixed stops 21 and limit the carriage movement.

In front of the type carriage are two inking rollers 38 disposed for inking the type when the carriage is shifted from side to side along the bar 18. These rollers are rotatably mounted in cups 39 which are supported by leaf spring members 40 disposed at opposite sides of the ball holder, fastened to the base by screws and serving to press the rollers against the type.

The manual operating means of the printing mechanism is disposed in a fixed position at the rear of the type carriage. For supporting said means the base is formed with an upstanding ear 41 disposed in longitudinal alinement with the center of the ball holder and formed with a longitudinal cleft 42. A type hammer 43 is disposed in the forward portion of said cleft and pivoted upon a pin 44 mounted in the ear. The hammer has a forwardly extending nose 45 for engaging the rear end of any selected one of the type members and projecting the member against the supported ball, and a tail portion 46 extending rearward in the cleft. At the rear of the type hammer is an operating lever 47 pivoted within the cleft upon a pin 48. Forwardly of pin 48 the lever is forked to receive the tail 46 of the type hammer and form an actuating finger 49 for rocking the hammer forward and an edge 50 for rocking the hammer backward or retracting it. The lever also has an arm 51 extending downward through a slot 52 in the base. Rearwardly of its pivot the lever forms a long depressible operating handle.

Mounted in the ear 41, below the type hammer, is a centering and locking means for accurately positioning a selected type with relation to the ball, and locking the carriage against shifting during a printing operation. A pin or bolt 53 is fitted to slide fore and aft through a bore 54 opening through the front edge of the ear and has an enlarged head fitted to slide in a larger bore 55 opening through the rear edge of the ear. A compression spring 56 disposed in the bore 55 tends to thrust the pin rearward and holds the head in engagement with the depending arm 51 of the operating lever. The pin has a pointed forward end 57 normally disposed within the bore 54. The lower edge of the rear cover plate 34 of the type carriage is formed with V-shaped notches 58 corresponding in number and spacing with the type members. For a printing operation the carriage is shifted to position the appropriate type member into alinement, or approximate alinement, with the nose 45 of the type hammer, as indicated by the appropriate letter upon the index strip 30. Then, the handle of the operating lever is depressed to rock the type hammer, bring the nose of the hammer against the registered type member and force the latter forward for printing upon the supported ball. There is a certain degree of clearance, however, between the nose of the hammer and the type member so that before the latter is engaged and shifted for printing, the arm 51 of the lever thrusts the centering and locking pin 53 forward and causes the pointed end of the pin to enter an adjacent one of the notches 58. If said notch is not accurately centered with relation to the pin the pointed end of the latter will slightly shift the carriage to permit the pin to enter the notch. Thereby the type is accurately trued and the carriage is positively locked during the printing operation.

The depending lever arm 51 also serves to operate the letter-spacing mechanism. Said mechanism includes a lever 59 pivotally attached intermediate its ends to the under side of the base by a screw 60, at a point directly back of the ratchet wheel 13. The lever is disposed transversely of the base and a ratchet dog 61 is pivoted as at 62, to one end of the lever and extends forward to

operatively engage the teeth of the ratchet wheel. A torsion spring 63 encircles the pivot 64 and engages the lever and a tail portion of the ratchet dog to yieldably press the latter into engagement with the ratchet wheel. Pivotedly connected to the opposite end of the lever is an operating link 65 which extends rearward and has a laterally offset eye 66 at its rear end through which the depending lever arm 51 extends. At its lower end said arm is notched for retaining the link in operative engagement with it, and at one side the eye 66 is notched as at 67 for passing it over the end of the lever arm. Anchored to the link directly back of its connection with the lever arm is a strong tension spring 68 which extends rearward and has its rear end anchored to a fixed pin 69 at the under side of the base. Said spring acts through the lever arm 51 to restore the operating lever and the type hammer to normal position after a printing operation. It also tends to pull the link 65 rearward and rock the ratchet lever 59 to thrust the ratchet dog forward. This tendency is normally resisted however by the operating lever whose upward swing to normal position is limited by contact of its finger 49 with the bottom of the cleft in the ear 41.

When the operating handle is depressed, against the resistance of spring 68, the link 65 is pushed forward and the ratchet lever 59 is rocked to swing the ratchet dog 61 rearward away from the ratchet wheel to set the dog for a feed stroke. When the pressure upon the operating handle is relieved the handle is elevated to normal position by spring 68, and the link 65 is pulled rearward to rock the ratchet wheel in a reverse direction and thrust the ratchet dog forward to reengage the ratchet wheel and rotate the latter and its attached ball holder one step for letter spacing. Upon the ratchet lever 59 is a stop 59' which limits the swing of the ratchet dog under the influence of spring 63 when the dog is swung free from the ratchet wheel. When the ratchet is thrust forward on its feed stroke, stop 59' engages a tooth of the ratchet wheel and limits the rotation of the wheel.

The operating lever and the locking pin 53 also serve to operate a mechanism for dislodging a ball from the cup-like holder. Fitted for vertical shifting through the bore 15 in the ball holder and the aperture 16 in the ratchet is a plunger pin 70. A rod 71 is operatively connected to the latter, the rod having a spherical end 72 which projects into an aperture in the plunger. From the plunger the rod 71 extends rearward and has a reduced rear end. A bracket 73 is secured to the under side of the base by a screw 74 and has a depending ear 75. Said ear has an aperture in which the reduced end of rod 71 is loosely supported so that the rod may swing up and down. An operating link 76 has an eye 77 pivoted upon the rod intermediate the ends of the latter and extends upward through a transverse slot in the base directly rearward of the carriage-supporting bar 18. At its upper end link 76 is formed with a head 78 having oppositely inclined upper edges 79 and an aperture 80 which tapers forwardly. Two spring fingers 81 are clamped to the base by a bracket plate 82 held by screw 74, and extend forward to engage the opposite sides of the link 76 and yieldably hold it upright with its aperture 80 in front of the locking pin 53 but slightly below the center line of the pin. A head 70^a upon the pin 70, and normally countersunk within the cup 6, maintains this relation.

When the link is in upright position its head is disposed in the path of the retaining flange 33 of the carriage so that when the carriage is shifted from either of its extreme positions to a printing position said flange will engage the link head and rock the link to one side or the other entirely clear of the pin 53. The carriage flange 33 slidably engages one of the edges 79 of the link and holds the latter rocked aside while the carriage is in printing position. The locking pin may therefore be projected to carriage-locking position without any effect upon the ball-dislodging mechanism. When, however, the carriage is shifted to either side, out of printing position, the link is freed and one or the other of the springs 81 returns it to upright position. Then, upon depression of the operating lever and projection of the pin 53 the pointed end of the pin will be forced through the aperture 80 of the link and exert a camming action which will raise the link and the rockable rod 71 and project the plunger 70 upward into the ball-supporting cup, as shown in Fig. 7. The ball is engaged by the plunger and dislodged from its tapered seat so that it may be easily removed. An aperture 83 in the carriage supporting bar 18 provides clearance for the end of the projected pin. Upon release of the operating lever and its return to normal position the pin 53 is retracted by the spring 56 and withdrawn from the aperture 80 of the link 76. Thereupon, the plunger 70, rod 71 and link 76 drop to normal position.

The depression of the operating handle 47 is limited by a stop screw 47^a which is adjustably screwed into the base and locked by a jam nut 47^b. By depression of the handle each time until it contacts the stop screw, uniformity of printing is insured.

To summarize the operation of the device: A golf ball B is placed in the cup-like holder 6 where it wedges slightly in the tapered ball seat 7 and is frictionally held to rotate with the holder. The type carriage is shifted to register the appropriate letter upon the index strip 30 with the type hammer 43 and the operating handle is depressed to first project the type-centering and carriage-locking pin 53 and next cause the positioned type to be pressed against the ball as shown in Fig. 5. The type are preferably deeply cut and the operating handle is preferably forced down as far as the stop screw will permit, to press the type deeply into the pitted surface of the ball and make a cleancut, permanent printed impression. The impressions are made in a direction obliquely downward, radially of the ball, and tend to firmly wedge the ball in its seat and prevent accidental shifting and consequent uneven spacing of the printed characters. Character-spacing rotation of the ball holder 6 is effected by the operating lever and the spring 63 operating upon the ratchet mechanism within the base. By depressing the handle of the operating lever to a less degree than is required for printing, the ratchet mechanism is operable to rotate the ball holder for spacing names or initials. When a name or other identification has been completely printed upon the ball the type carriage is shifted to one side and the operating lever is fully depressed to project the pin 53 through the eye 80 of the link 76, thereby elevating the rod 71 and elevating the plunger 70 within the ball holder to engage the ball and force it from its tapered seat, as shown in Fig. 7. The centering of the type, the locking of the carriage, the printing, the spacing of the characters and the dislodging of the ball are all accomplished conveniently by

operating the lever 47. The device is designed throughout to render it efficient, reliable and durable.

The ball holder 6 is preferably formed to accommodate golf balls of an approved standard size. For accommodating the holder to balls of a smaller size an adapter ring 84 is provided. This ring is designed for fitting into the cup-like ball holder. It has a downwardly tapering ball seat portion 85 fittable into the ball seat 7 of the holder, an upper flange 86 to rest upon the upper edge of the holder, and a cylindrical lower portion 87. Said lower portion has a plurality of bayonet slots 88 opening through its lower edge and adapted to interlock with pins 89 fixed in the ball holder, to releasably hold the adapter in place.

What I claim is:

1. A device for marking a ball comprising a printing mechanism having a fixed printing point; a ball holder having a downwardly tapered ball seat for frictionally holding a ball; a mounting for said ball holder supporting it for rotation to bring spaced points on the ball surface to said printing point for marking by the printing mechanism; and mechanism for automatically rotating the holder a predetermined degree after each printing operation for spacing the printed marks.

2. A device for marking balls, comprising a rotatably mounted ball holder; a type carriage bearing a plurality of individually shiftable type members and mounted for shifting past the ball holder to position any selected one of the type members in printing relation to a ball supported by the holder; manually operable means to force a positioned type member against the supported ball for printing a character thereon; and means operable by said manually operable means to free the ball from its holder.

3. A device for marking balls comprising a group of marking elements mounted for shifting; a ball holder; means supporting said ball holder and group of marking elements for relative shifting to position any selected one of the marking elements in operative relation to a ball supported by the holder; manually operable means to shift the positioned marking element for marking the ball; a mark-spacing mechanism to cause relative step-by-step movement between the supported ball and the group of marking elements for spacing marks upon the ball; and means operable by said manually operable means to free the ball from the holder.

4. A device for marking a ball, comprising a rotatably mounted upwardly opening cup-like ball holder having a downwardly tapering ball seat for frictionally holding the ball with the upper portion thereof exposed; a type carriage bearing a plurality of shiftable type members and mounted for shifting past the ball holder to position any selected one of the type members in a printing relation to the exposed portion of the ball; manually operable means for shifting the positioned type member against the supported ball for printing a characted thereon; a mechanism controlled by said manually operable means to rotate the ball holder and ball-step-by-step for character spacing; and means operable by said manually operable means to dislodge the ball from said tapered seat.

5. A device for marking a ball, comprising a rotatably mounted ball holder having a downwardly tapering ball seat for frictionally holding the ball with the upper portion thereof exposed; and a type carriage bearing a plurality of shiftable type members and mounted for shifting past the ball holder to position any selected one of said type members into a printing relation with the supported ball, the type members being supported by the carriage for shifting obliquely downward toward the ball substantially radially of the latter for printing a mark thereon.

6. A device for marking a ball, comprising a rotatably mounted ball holder having a downwardly tapering ball seat for frictionally holding the ball with the upper portion thereof exposed; a type carriage bearing a plurality of shiftable type members and mounted for shifting past the ball holder to position any selected one of said type members into a printing relation with the supported ball, the type members being supported by the carriage for shifting obliquely downward toward the ball substantially radially of the latter for printing a mark thereon; and means for rotating the ball holder step by step for mark-spacing.

7. A device for marking a ball, comprising a rotatably mounted ball holder having a downwardly tapering ball seat for frictionally holding the ball with the upper portion thereof exposed; a type carriage bearing a plurality of individually shiftable type members and mounted for shifting past the ball holder to position any selected one of said type members into a printing relation with the supported ball, the type members being supported by the carriage for shifting obliquely downward toward the ball substantially radially of the latter; manually operable means for shifting the positioned type member against the ball for printing a character thereon; a mechanism operated by said manually operable means for causing rotation of the ball holder and ball for character spacing; and means operable by said manually operable means for dislodging the ball from its tapered seat.

8. A device for marking a ball, comprising a ball holder having a downwardly tapering seat for frictionally holding the ball with the upper portion thereof exposed; and a type member mounted for shifting obliquely downward against the exposed portion of the ball for printing a mark thereon.

9. A device for marking balls, comprising a rotatably mounted ball holder; a type carriage bearing a plurality of individually shiftable type members and mounted for shifting past the ball holder to position any selected one of the type members in a printing relation to a ball supported by the holder; manually operable means to shift a positioned type member against the ball for printing a mark thereon, the carriage being shiftable to a position wherein all of the type members are out of printing relation with the ball; and a mechanism operable by said manually operable means when the carriage is in said position to free the ball from the holder.

10. A device for marking balls, comprising a rotatably mounted ball holder; a type carriage bearing a plurality of individually shiftable type members and mounted for shifting past the ball holder to position any selected one of the type members in a printing relation to a ball supported by the holder; manually operable means to shift a positioned type member against the ball for printing a mark thereon, the carriage being shiftable to a position wherein all of the type members are out of printing relation with the ball; a mechanism operable by said manually operable means when the carriage is in said position to free the ball from the holder; and means operated by the carriage to render said

mechanism inoperative when any one of the type members is positioned for printing.

11. A device for marking balls, comprising a ball holder; a carriage bearing type means and mounted for shifting the type means into and out of printing register with a ball supported by the holder; manually operable means for operating the type means to print upon the ball; locking means operable by said manually operable means to hold the carriage against shifting during a printing operation; and means operable by said manually operable means through the medium of said locking means to dislodge the ball from the holder when the carriage is in position disposing the type means out of register with the ball.

12. A device for marking a ball, comprising a rotatably mounted ball holder; a type carriage bearing a plurality of individually shiftable type members and mounted for shifting past the ball holder to position any selected one of said type members in printing register with a ball supported by the holder, the carriage being also shiftable to a non-printing position with all of the type members out of register with the ball; a lever manually operable for shifting a positioned type member for printing a mark upon the ball; a type-centering and carriage-locking member shiftable by said lever to engage and hold the type carriage during a printing operation; and a mechanism for dislodging the ball from the holder including a rockable member engageable by the type carriage for rocking thereby out of the path of said locking member when the carriage is in position for a printing operation, and means to swing the rockable member into the path of said locking member when the carriage is in non-printing position clear of the rockable member, the latter being then engageable by the locking member to operate the ball-dislodging mechanism when the lever is operated.

13. A device for marking balls, comprising a rotatably mounted ball holder; a carriage bearing type means and mounted for shifting the type means into and out of printing register with a ball supported by the holder; manually operable means for operating the type means to print a mark upon the ball; locking means operable by said manually operable means to hold the carriage against shifting during a printing operation; means operable by said manually operable means to dislodge the ball from the holder when the carriage is in position disposing the type means out of register with the ball; and means operable by said manually operable means to cause rotation of the holder a step after each printing operation, for spacing the printed marks upon the ball.

14. A device for marking balls, comprising a rotatably mounted cup-like ball holder having a downwardly tapering ball seat; an adapter ring removably fittable in said ball holder and forming a downwardly tapering ball seat of less diameter than said first seat; and a mechanism for printing upon a ball supported in the holder.

15. A device for marking balls, comprising a rotatably mounted, cup-like ball holder having a downwardly tapering ball seat; an adapted ring removably fittable in said ball holder and forming a downwardly tapering ball seat of less diameter than said first seat; means to detachably hold said adapter ring in place and lock it to rotate with said holder; and a mechanism for printing upon a ball supported in the holder.

16. A device for making a ball, comprising an annular ball holder opening upward to permit insertion and removal of the ball and formed to hold the ball in a mark-receiving position with a portion of the ball exposed above the holder; a marking mechanism operable to apply marks to the exposed portion of the ball; and a mounting for the ball holder supporting it for rotation about a vertical axis to rotate the ball for mark spacing therearound.

17. A device for marking a ball, comprising a ball holder opening upward to permit insertion and removal of the ball and adapted to hold the ball with an upper portion thereof exposed; a mounting for said holder supporting it for rotation about a vertical axis; a ball-marking mechanism including a carriage disposed at one side of the ball holder and bearing a plurality of ball markers mounted on the carriage for individual shifting obliquely downward to apply a mark to said exposed portion of the ball, a mounting for said carriage supporting it to shift past the ball holder along a horizontal straight line to bring any one of the markers into marking register with the ball, and an operating handle depressible to shift a registered marker toward the ball for marking it; and a mark-spacing mechanism to rotate the ball holder and ball, including a ratchet wheel fixed to the ball holder, a shiftable feed pawl to engage said ratchet wheel and rotate it, an operative connection between the operating handle and said pawl to retract the latter when the handle is depressed, and a spring operatively connected to the handle and to the pawl to elevate the handle and move the pawl on its feed stroke.

18. A device for marking a ball, comprising a ball holder opening upward to permit insertion and removal of the ball and adapted to hold the ball with an upper portion thereof exposed; a mounting for said holder supporting it for rotation about a vertical axis; and a ball-marking mechanism including a carriage disposed at one side of the ball holder and bearing a plurality of ball markers mounted on the carriage for individual shifting obliquely downward to apply a mark to said exposed portion of the ball, a mounting for said carriage supporting it to shift past the ball holder along a horizontal straight line to bring any one of the markers into marking register with the ball; and manually operable means to shift a registered marker to mark the ball.

19. A device for marking a ball, comprising a ball holder to support the ball for marking it; a mounting for said holder supporting it for rotation; a ball-marking mechanism including a carriage disposed at one side of the ball holder and bearing a plurality of ball markers mounted on the carriage for individual shifting obliquely downward to apply a mark to the ball, a mounting for said carriage supporting it to shift past the ball holder to bring any one of the markers into marking register with the ball, and an operating handle depressible to shift a registered marker toward the ball for marking it; a mark-spacing mechanism to rotate the ball holder and ball; and spring means to elevate the operating handle after a marking operation and cause a spacing operation of said mark-spacing mechanism.

20. A device for marking a ball, comprising a ball holder opening upward to permit insertion and removal of the ball and adapted to frictionally hold the ball with an upper portion thereof exposed; a mounting for said holder supporting it for rotation about a vertical axis; a ball-marking mechanism including a carriage disposed at one

side of the ball holder and bearing a plurality of ball markers mounted on the carriage for individual shifting obliquely downward to apply a mark to said exposed portion of the ball, a mounting for said carriage supporting it to shift past the ball holder along a horizontal straight line to bring any one of the markers into marking register with the ball, and an operating handle depressible to shift a registered marker toward the ball for marking it, said ball holder, carriage and operating handle being disposed in tandem relation; and a mark-spacing mechanism controlled by said handle to rotate the ball holder and ball step-by-step.

21. A device for marking a ball, comprising a ball holder opening upward to permit insertion and removal of the ball and formed to hold the ball with an upper portion thereof exposed; and a ball-marking mechanism including a carriage disposed at one side of the ball holder and bearing a plurality of ball markers mounted on the carriage for individual shifting downward to apply a mark to said exposed portion of the ball, a mounting for said carriage supporting it to shift past the ball holder to bring any one of the markers into register with the ball, and an operating handle depressible to shift a registered marker toward the ball for marking it, said ball holder, carriage and operating handle being disposed in tandem relation with the carriage located between the ball holder and the operating handle.

22. A device for marking a ball comprising an upwardly opening ball holder adapted to frictionally hold the ball with a zone of the ball exposed above the holder; a mounting for said holder supporting it for rotation about a substantially vertical axis; and a marking element mounted for shifting obliquely downward approximately radially of the supported ball to mark the latter in said exposed zone thereof.

23. A device for marking a ball comprising a ball holder having an open free end and adapted to frictionally hold the ball with a zone of the ball exposed beyond the free edge of the holder; a mounting for said holder supporting it for rotation about a central axis; and a marking element mounted for shifting toward the ball holder, abliquely of the axis of rotation of the ball holder, and approximately radially of the supported ball to mark the latter in said exposed zone thereof.

24. A device for marking a ball comprising a ball holder having an open free end and adapted to frictionally hold the ball with a zone of the ball exposed beyond the free edge of the holder; a mounting for said holder supporting it for rotation about a central axis; a marking element mounted for shifting toward the ball holder, obliquely of the axis of rotation of the ball holder, and approximately radially of the supported ball to mark the latter in said exposed zone thereof; and mechanism to rotate the ball holder step-by-step for mark spacing around said zone.

25. A device for marking a ball comprising an open cup-like ball holder having a ball seat tapering inward from the open end of the holder to frictionally hold the ball with a zone thereof exposed beyond the open end of the holder; a mounting for said holder supporting it for rotation about its central axis; a marking element mounted for shifting obliquely of said axis of the ball holder inwardly toward the open end of the holder and approximately radially of the supported ball to mark the latter; manually operable means to shift said marking element to mark the ball; and means controlled by said manually operable means to rotate the ball holder step-by-step for mark spacing around said zone of the ball.

26. A device for marking a ball comprising an upwardly opening ball holder adapted to frictionally hold the ball with a zone thereof above the center of the ball exposed above the holder; a mounting for said holder supporting it for rotation about a substantially vertical axis; a plurality of marking elements; a carriage bearing said marking elements and mounted to shift past the ball holder to bring any one of said elements opposite said exposed zone of the ball and supporting the elements for movement obliquely downward approximately radially of the ball to mark the latter; manually operable means to shift said elements against the ball for marking it; and means controlled by said manually operable means to rotate the ball holder step-by-step for mark spacing around said zone of the ball.

27. A device for marking a ball comprising a ball holder having means to frictionally hold the ball; a marking element mounted for shifting into and out of alignment with the supported ball and mounted for shifting against the ball for marking it; manually operable means to shift said marking element against the ball; an ejector plunger mounted to shift into the ball holder to dislodge the ball; and means operable by said manually operable means when the marking element is shifted out of alignment with the ball to shift said plunger to dislodge the ball.

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