Nov. 19, 1935. O. H. PIEPER 2,021,518

DENTAL APPARATUS

Filed June 28, 1934 3 Sheets-Sheet 1

Fig. 1

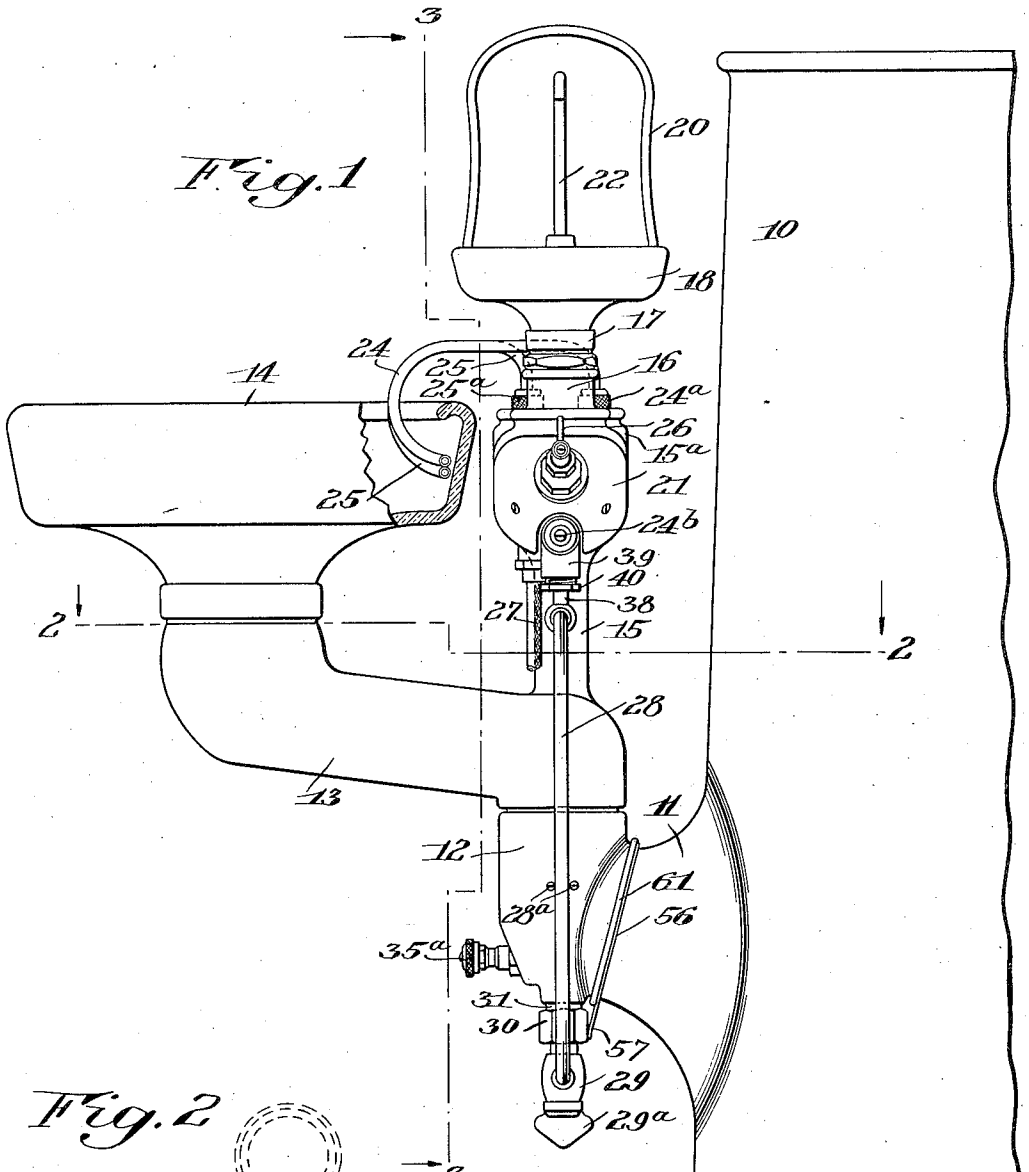
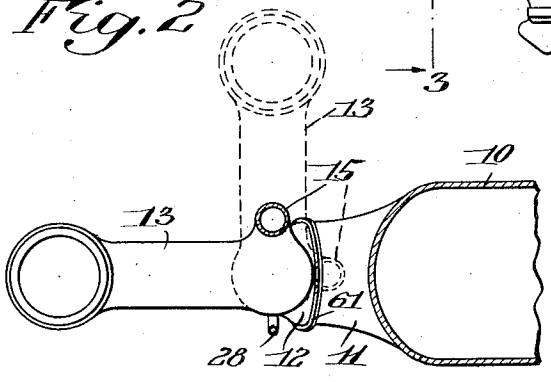


Fig. 2



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DENTAL APPARATUS

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Fig. 3

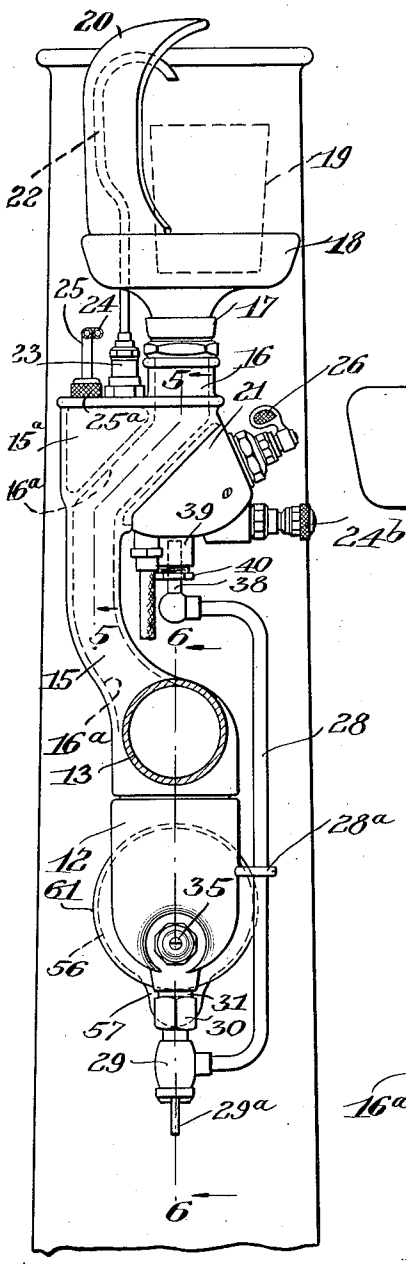


Fig. 10

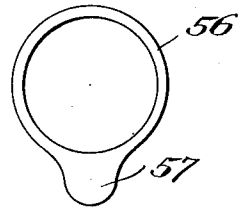


Fig. 4

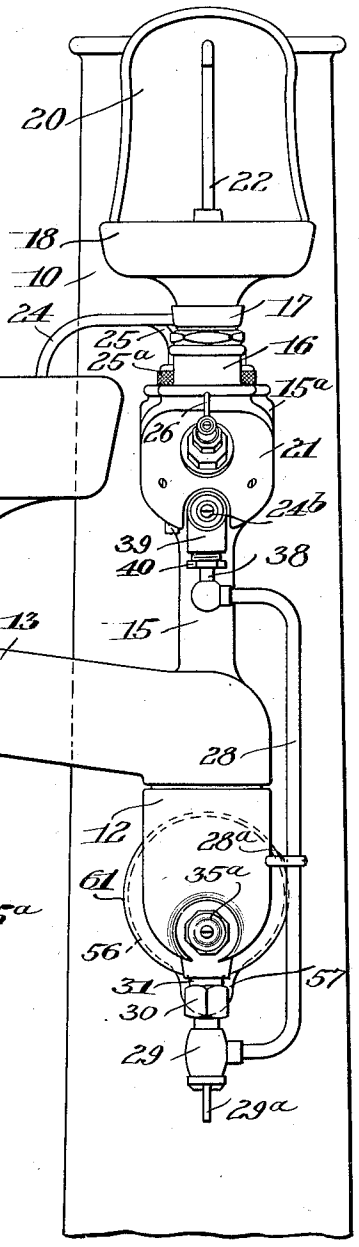
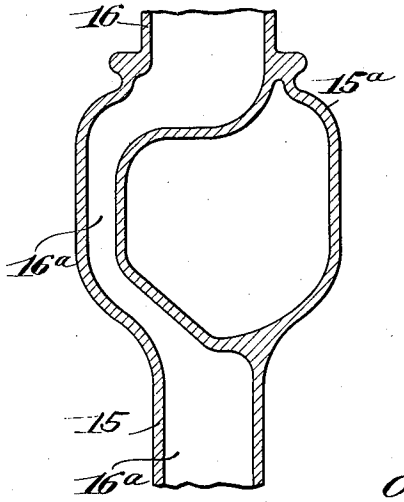


Fig. 5



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DENTAL APPARATUS

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Fig. 6

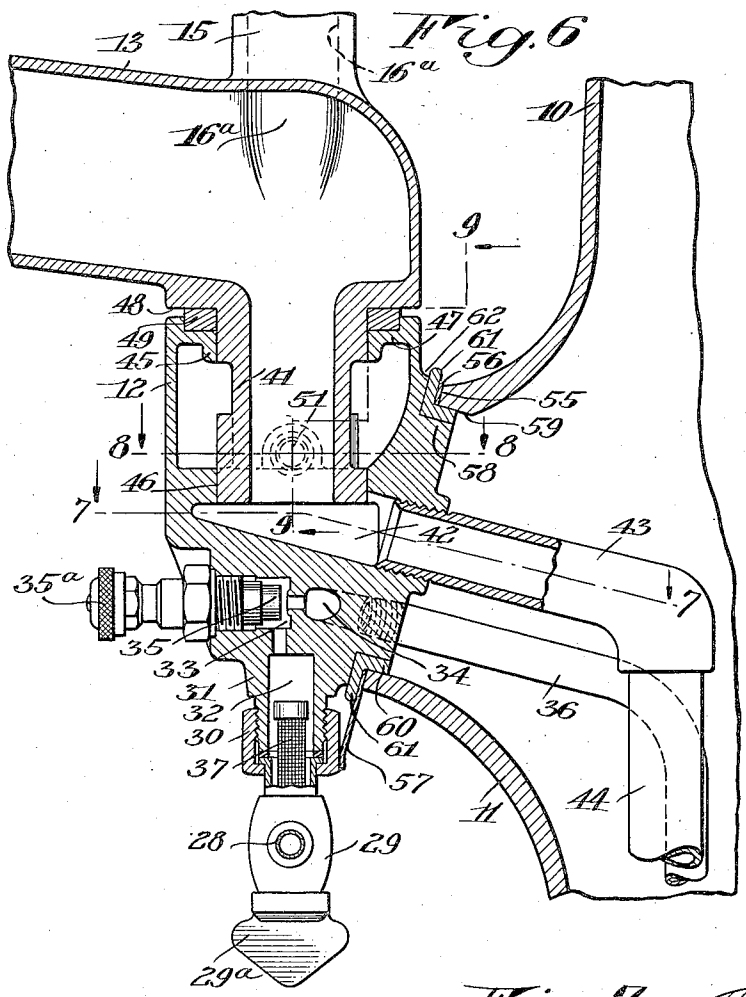


Fig. 8

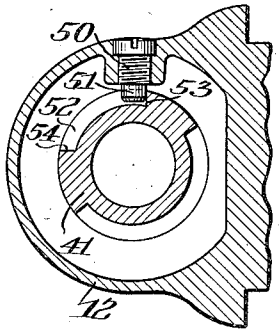


Fig. 9

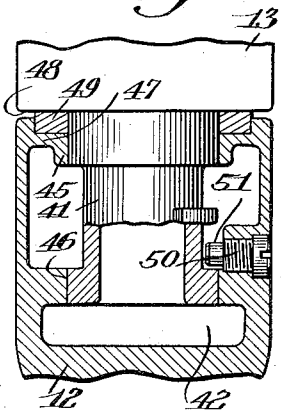
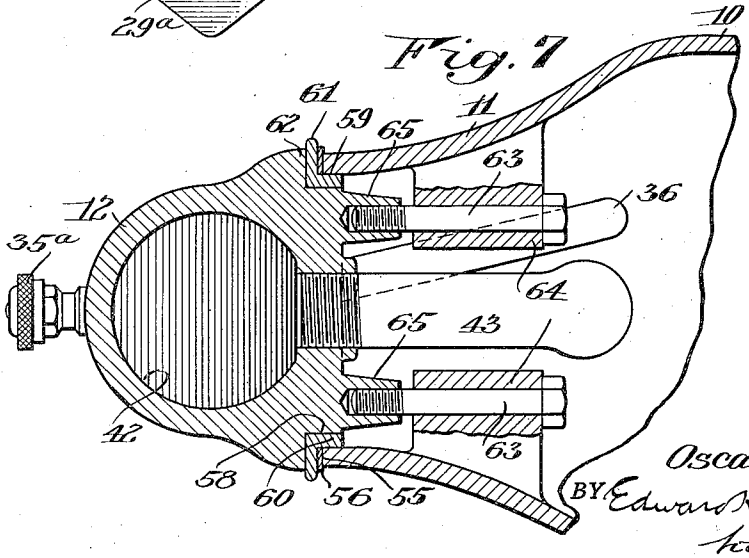


Fig. 7



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Patented Nov. 19, 1935 2,021,518

UNITED STATES PATENT OFFICE

2,021,518

DENTAL APPARATUS

Oscar H. Pieper, Rochester, N. Y.

Application June 28, 1934, Serial No. 732,845
In Germany July 15, 1933

28 Claims. (Cl. 4—263)

The present invention relates to dental apparatus and more particularly to a dental stand or pedestal having a fountain cuspidor and glass holding unit adapted to swing thereon to various positions and having liquid supply and discharge connections concealed within the pedestal, one object being to provide an improved unitary device of this class which is simple and compact in construction and efficient and economical in operation.

A further object of the invention is to provide improved apparatus of this nature in which the several parts are advantageously arranged to facilitate convenience in operation or usage, both with respect to the operator and the patient to be treated.

A further object of the invention is to provide improvements in a rotatable or swingingly mounted unit of the class described embodying a new and advantageous arrangement of cuspidor bowl and glass holder.

Another object of the invention is to provide, in combination with a dental stand or pedestal, a cuspidor and glass holding unit having an improved arrangement of liquid supply and discharge connections combined with a mounting on the pedestal upon which the unit is free to swing at all times to any of various positions most convenient to the operator during treatment of the patient.

A further object of the invention is to provide an improved mounting for a combined waste basin and glass holder unit including a hollow bearing for swingingly supporting the unit and having an improved arrangement of liquid supply and discharge connections leading to and from the same.

A further object of the invention is to provide in conjunction with dental equipment stands, pedestals, and the like, improved means for protecting the same against the effects of drippings discharging from the various liquid holding parts carried by the stand, as a result of condensation due to the differences in temperature at the exterior surfaces of the parts and the liquids or fluids therein.

To these and other ends the invention resides in certain improvements and combinations of parts, all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings:

Fig. 1 is a view in elevation and partly in section illustrating one form of the invention;

Fig. 2 is a sectional plan taken on line 2—2 of Fig. 1 showing by full and dotted lines the extreme positions of the supporting arm for the cuspidor bowl and other parts;

Fig. 3 is a sectional elevation taken substantially on the line 3—3 of Fig. 1;

Fig. 4 is an elevation corresponding to Fig. 3 in which the cuspidor bowl and tumbler support have been swung through an angle from 90°;

Fig. 5 is a fragmentary sectional elevation taken substantially on line 5—5 of Fig. 3;

Fig. 6 is a fragmentary sectional elevation taken substantially on line 6—6 of Fig. 3;

Fig. 7 is a fragmentary sectional plan taken on line 7—7 of Fig. 6;

Fig. 8 is a fragmentary plan taken on line 8—8 of Fig. 6;

Fig. 9 is a fragmentary sectional elevation taken on line 9—9 of Fig. 6, and

Fig. 10 is a detailed view of a guard for deflecting from the pedestal the drippings discharging from the cuspidor arm as a result of condensation accumulating thereon.

The same reference numerals throughout the several views indicate the same parts.

The invention relates to dental apparatus and particularly to an improved arrangement of cuspidor bowl or waste basin and associated parts, such as a drinking glass holder, valve head, and supply and discharge connections, as well as other parts described hereinafter.

With the present construction the cuspidor and glass holder unit is adapted for a free swinging movement at all times on the pedestal to whatever position the operator may desire, one advantage of this arrangement being to provide for convenient access to that side of the dental chair nearest the pedestal or dental equipment stand, another advantage being that the liquid supply and discharge conduits leading to and from the bearing on which the unit is adapted to rotate are enclosed within the pedestal and fixed on the bearing so that the unit can be readily removed when desired without having to detach it from said conduits as has been necessary in previously designed cuspidor mountings.

Heretofore it has generally been customary to position the drinking glass holder at the side of the bowl farthest from the inner end of the supporting arm therefor, which has made it necessary to extend or lengthen the arm to provide supporting means for the holder. In the present arrangement the glass holder and its support is positioned adjacent the inner side of the bowl or, in other words, between the bowl and the pedestal and, in fact, substantially on the

pivotal axis about which the bowl is mounted to swing. This affords a compact arrangement and reduces the overhang of the gass holder and parts associated therewith, including the valve head and supply and discharge connections leading to and from the head. This arrangement not only reduces the amount of material used in the construction of the parts, but also affords a design of more pleasing appearance, and one which can be manufactured at a reduced cost, as compared to previous designs of the type outlined above.

A further advantage of placing the glass holder and associated parts relatively close to the pedestal, or between the latter and the bowl, is that it does not interfere with the movements of the operator and furthermore it permits the bowl to be used with greater convenience by the patient.

Furthermore, with the present arrangement, the swinging or rotating parts are better balanced than in previously designed units of this class, by reason of the fact that the entire weight of the glass holder and the several parts associated therewith is substantially on the axis of the pivotal support for the unit, thus greatly reducing the overhang of the weight carried by the support.

Referring to the drawings, **10** designates a support, preferably in the form of a dental stand or pedestal and having a laterally projecting portion **11** on which is secured a mounting or bearing **12** designed to rotatably receive and support a tubular member in the form of an arm **13** having thereon a cuspidor bowl or basin **14** communicating therewith. Supported on the inner end of the tubular member is a hollow upstanding arm **15**, the upper end of which is enlarged as shown at **15***a* and provided with a reduced extension **16** forming a well, within which may be positioned a strainer, not shown, connected with a base ring **17**. The base ring is suitably secured upon the reduced extension and carries a glass holding bowl or receptacle **18** for supporting the glass or tumbler shown by dotted lines at **19**, the bowl having a splash guard **20** constructed in any desired manner and adapted to protect the glass against expectoration or splashing from the cuspidor.

The water supply system for the cuspidor bowl, glass holder, and saliva ejecting means described hereinafter, is controlled by a single valve head, not shown, which is detachably mounted within the enlarged upper end portion **15***a* of the arm **15** and which is provided with a protecting detachable cover **21**, Figs. 3 and 4.

The glass holder is supplied with water through an upwardly projecting nozzle or goose neck tube **22** overhanging the glass and adapted for discharging thereto. The nozzle tube has its lower end suitably connected with an outlet passage in the valve head, as by means of a coupling **23**, said passage being under the control of a valve supported by the head, not shown, but having an operating portion **24***b* for opening and closing the valve.

The water discharging through the head is supplied to the bowl through either of two nozzle pipes **24** and **25** suitably connected with outlet passages in the valve head as by means of the couplings **24***a* and **25***a*, located on the enlarged upper end **15***a* of the arm **15**.

A valve for controlling said outlet passages, not shown, is housed within the head and has an operating portion **26** for setting it at different control positions, the valve being adapted when opening either of the passages controlled thereby to close the other and one of the passages when open being placed in communication with suitable saliva ejecting means housed within the head and from which extends a flexible conduit **27** carrying the usual or any suitable terminal for insertion within the patient's mouth for withdrawing the saliva, not shown. By shifting the valve controlled by the operating member **26** to one or the other of its positions, either the direct water supply or the saliva ejecting means may be brought into operation, thereby flushing the cuspidor bowl, since in either case the water supply conduit will be opened to permit the water to flow through one or the other of the conduits **24** and **25**.

The valve head and the valves therein, the saliva ejecting means, and the supply and discharge connections carried by the head may be constructed and arranged in any preferred or well known manner, but are preferably similar in construction to the corresponding parts of U. S. Patent No. 1,626,689, granted to A. F. Pieper, May 3, 1927.

The liquid supply conduit leading to the valve head, designated by the reference character **28**, is disposed exteriorly of the bearing **12** and cuspidor supporting arm, as shown in Figs. 3 and 4, and is preferably fixed relative to the bearing or held against turning by a pair of studs **28***a* screwed into the bearing on opposite sides of the conduit, as shown in Fig. 1.

The inlet end of the conduit **28** is connected with a coupling **29** which in turn is detachably connected by a nut **30** with the reduced extension **31** on the lower end of the bearing **12**. The extension is provided with an outlet passage **32** communicating with a valve chamber **33** having an inlet passage **34** adapted to be controlled by a valve **35** disposed within said chamber and having an operating portion **35***a*. Leading to the inlet passage **34** of the bearing is a supply pipe or connection **36** disposed within the hollow pedestal and adapted to receive its supply from a suitable source, not shown. The valve **35** serves to control the water supply for the cuspidor and glass holder and is intended to be closed when the apparatus is not in use. The coupling **29** is provided with a strainer **37** extending within the outlet passage **32** as shown in Fig. 6.

The fixed supply conduit **28** has its upper or outlet end portion **38** disposed on the axis of rotation of the cuspidor, said end portion being received within a depending sleeve **39** on the valve head, and a liquid-tight joint being afforded between said parts by means of suitable packing, carried by a packing gland **40** screwed into the sleeve **39**.

The connection afforded by the parts **38** and **39** is preferably in the form of a slip-joint, but any suitable form of joint may be substituted for that shown which will permit the valve head and its supporting arm **15** and other parts carried thereby to rotate about the axis of the bearing **12** when swinging the cuspidor and its supporting arm **13** between the full and dotted line positions shown in Fig. 2.

The liquid supplied to the cuspidor is adapted to discharge therefrom into the tubular arm **13**, from whence it passes through the reduced outlet portion **41** of the arm to the passage **42** of the bearing **12** and into the short pipe **43** connected with said passage and thence through the pipe **44** extending vertically within the pedestal

and adapted to convey the liquid therefrom to a suitable discharge pipe, not shown.

The overflow or waste liquid discharging from the glass holding receptacle 18 is discharged through the extension 16 of the arm 15 into and through the passage 16a of the arm, from whence it flows through the reduced portion 41 of the arm 13 to the discharge pipes 43 and 44.

The depending outlet portion 41 of the arm 13 is mounted for rotation within the upper and lower annular portions 45 and 46 of the bearing 12, Fig. 6, and interposed between the end wall 47 of the bearing and the shoulder 48 of the arm 13 is a bearing ring 49 formed of any suitable material and affording a seat for said shoulder.

The means for securing the arm 13 against axial displacement on the bearing 12 preferably comprises a screw 50 threaded within the wall of the bearing and having a reduced end 51 overlying the segmental flange-like portion 52 of the outlet portion of said arm, Figs. 8 and 9.

The screw also serves to limit the extent of rotation of the arm through engagement with the abutments 53 and 54 of the outlet portion 41 thereof, the abutments in the present disclosure being spaced to afford a swinging movement for the arm of substantially 90°, but if preferred, the distance between the abutments may be changed to vary the extent of the swinging movement as desired.

The tubular portion 11 of the pedestal is provided with a seat or shoulder 55 on which is disposed a substantially ring-shaped member 56 having a lateral extension 57 provided for a purpose described hereinafter.

Sleeved on the annular portion 58 of the bearing 12 and engaging the inner face 59 of the tubular portion 11 of the pedestal is a deflecting member 60 provided with a flange 61 of somewhat larger diameter than said tubular portion, said flange constituting means for deflecting the drippings discharging from the cuspidor unit as a result of condensation, due to the differences in the temperatures at the exterior surfaces of the liquid receiving parts of the unit and the liquids held therein or flowing therethrough. The disk or flange 61, which is inclined to the horizontal, will readily intercept and deflect the drippings which may be discharged from the arms 13 and 15 of the unit upon the bearing 12, since the shoulder 62 of the bearing upon which the flange rests is of a diameter somewhat less than that of the flange. With this arrangement the flange will at all times prevent the drippings from discharging to the tubular portion 11 of the pedestal. Consequently the drippings accumulating on the flange and on the adjacent shoulder 62 of the bearing will be discharged upon the depending extension 57 of the ring-like member 56. The extremity of the extension 57 is preferably made to contact with the nut 30 for securing the coupling 29 on the lower extremity 31 of the bearing 12, so that the drippings will be received by the nut for discharge upon the coupling which is provided with a depending tapered portion 29a to facilitate discharge of the drippings at a point spaced from the pedestal.

The ring-like member 56 is preferably made of yieldable or spring-like material so that the depending portion 57 thereof will not interfere with the turning of the nut 30 when it is desired to remove the coupling 29 and the supply connection 28 extending therefrom.

Any suitable means may be provided for securing the bearing 12 upon the tubular portion 11 of the pedestal, such as the bolts 63 extending through the lugs 64 on said tubular portion, the bolts being threaded and screwed into boss-like members 65 of the bearing 12, as shown in Fig. 7.

I claim:

1. In dental apparatus, a pedestal, a bearing fixed on the pedestal at one side of the axis thereof, a receptacle mounted to swing freely on the bearing to different positions, a liquid supply connection extending within the pedestal, a valve housing adapted to rotate with the receptacle and having liquid inlet and outlet passages and provided with a valve for controlling the flow of the liquid through said passages, said outlet passage being adapted for communication with the receptacle, and a conduit having its outlet end fixed on the axis of rotation of the receptacle and discharging to the inlet passage of the valve housing and having its inlet end connected with the outlet end of said supply connection.

2. In dental apparatus, a pedestal, a bearing fixed on the pedestal at one side of the axis thereof, a receptacle mounted to swing freely on the bearing to different positions, a liquid supply connection leading through the pedestal to the bearing, a valve housing adapted to rotate with the receptacle and having liquid inlet and outlet passages and provided with a valve for controlling the flow of the liquid through said passages, said outlet passage being adapted for communication with the receptacle, and a conduit having its outlet end fixed on the axis of rotation of the receptacle and discharging to the inlet passage of the valve housing and having its inlet end connected with the outlet end of said supply connection through said bearing.

3. In dental apparatus, a pedestal, a bearing on the pedestal at one side of the axis thereof, a hollow arm mounted to swing freely on the bearing to different positions and provided with a receptacle communicating with the arm, liquid supply and discharge connections leading through the pedestal to and from the bearing, said discharge connection communicating with the arm through said bearing, a valve housing associated with the arm adapted to swing therewith and having liquid inlet and outlet passages provided with a valve for controlling the flow of the liquid therethrough, said outlet passage being adapted for communication with the receptacle, and a conduit having its outlet end fixed on the axis of rotation of the arm and discharging to the inlet passage of the valve housing and having its inlet end connected with the outlet end of said supply connection through said bearing.

4. In dental apparatus, a pedestal, a bearing on the pedestal at one side of the axis thereof, a receptacle mounted to swing upon the bearing, a valve and valve housing associated with the receptacle and adapted to swing therewith and to control a supply of liquid thereto, said housing having an inlet passage leading to the valve, and a liquid supply conduit discharging through the bearing, the outlet end of said conduit being fixed relative to the bearing and adapted to discharge within the housing inlet passage in all positions of the receptacle.

5. In dental apparatus, a hollow pedestal provided with a bearing at one side of the axis thereof and having liquid inlet and outlet conduits connected therewith and extending within the pedestal, a tubular arm mounted on said bearing to swing about a vertical axis and communicating with said outlet conduit, a receptacle

on the arm communicating therewith, a valve head on the arm having an inlet passage and an outlet passage communicating with the receptacle, a valve on the head for controlling the flow of liquid through said passages, and a fixed conduit having one end connected with said bearing and communicating with the inlet conduit leading thereto and having its discharge end communicating with the inlet passage of the valve head.

6. In dental apparatus, a hollow pedestal having a tubular support on its wall at one side of its axis, a bearing secured on said support and having liquid supply and discharge conduits leading to and from the same through the pedestal, a tubular arm rotatably mounted on said bearing and free to swing to different positions relative to the pedestal, said arm having a receptacle thereon carrying a valve head having an outlet conduit discharging to the receptacle, the valve head having valve means for controlling the flow of the liquid to the receptacle, said receptacle discharging through the arm and the bearing to the outlet conduit connected with the bearing, and a supply connection for the receptacle leading from the supply conduit of the bearing exteriorly of the latter to the valve head, the outlet end of the connection terminating on the axis of rotation of the receptacle, said valve head adapted to receive and being free to rotate upon the outlet end of said connection.

7. In dental apparatus, a hollow pedestal having a tubular support on its wall at one side of its axis, a bearing secured on said support and having liquid supply and discharge conduits leading to and from the same through the pedestal, a tubular arm rotatably mounted on said bearing and free to swing to different positions relative to the pedestal, said arm having a receptacle thereon and carrying a valve head having an outlet conduit discharging to the receptacle, the valve head having valve means for controlling the flow of the liquid to the receptacle, said receptacle discharging through the arm and the bearing to the outlet conduit connected with the bearing, a coupling depending from said bearing and communicating with the supply conduit discharging thereto, and a supply connection mounted exteriorly of the bearing and having angularly disposed inlet and outlet ends, said inlet end connected with said coupling and said outlet end terminating on the axis of rotation of the receptacle, said valve head adapted to receive and being free to rotate upon the outlet end of the connection.

8. In dental apparatus, a hollow pedestal having a transversely extending tubular support on its side wall, a vertically disposed bearing secured on said support and having liquid supply and discharge conduits leading to and from the same through the pedestal, a combined cuspidor and glass holder unit having a valve head and valve means for controlling the flow of the liquid, said unit adapted to swing freely upon said bearing to different positions and having liquid outlet passages for the cuspidor and glass holder discharging through the bearing and the outlet conduit connected therewith, and a supply connection for the glass holder and cuspidor mounted exteriorly of the bearing and extending from the supply conduit leading thereto to the valve head, the outlet end of the connection terminating on the axis of rotation of said unit, said valve head adapted to receive and being free to rotate upon the outlet end of said connection.

9. In dental apparatus, a hollow pedestal having a rigid bearing at one side thereof provided with liquid inlet and outlet conduits disposed within the pedestal, a tubular arm supported by said bearing for rotation about a vertical axis, a receptacle on said arm adapted to discharge liquid thereto, a valve and valve head on the arm for controlling the flow of liquid to the receptacle, said arm communicating through said bearing with the inlet conduit of the latter, and a fixed conduit disposed exteriorly of and having its inlet end connected with the inlet conduit of the bearing and its outlet end disposed on the axis of rotation of said arm and discharging to the valve head.

10. In dental apparatus, a hollow pedestal having a bearing thereon at one side of its axis and provided with a liquid discharge passage and a supply conduit leading thereto through the pedestal, a valve on the bearing for controlling said passage, a receptacle rotatable upon the bearing about a vertical axis, a valve and valve head associated with the receptacle and adapted to rotate therewith, said valve head having an inlet passage and an outlet passage discharging to the receptacle, and a conduit mounted exteriorly of and fixed relative to said bearing and having one end connected with the discharge passage thereof and the other end connected with the inlet passage of said head.

11. In dental apparatus, a support having a bearing thereon provided with a liquid discharge passage, a receptacle mounted to rotate on the bearing about a vertical axis, a vertically extending conduit fixed relative to the bearing having its lower end connected with the discharge passage thereof and its upper end terminating on the axis of the bearing, a valve head and valve associated with the receptacle and adapted to rotate therewith, said valve head having an inlet passage within which the upper end of said conduit extends, said valve head also having an outlet passage controlled by the valve and adapted for communication with said receptacle, and a liquid supply conduit connected with the discharge passage of the bearing.

12. In dental apparatus, a support, a bearing on the support provided with liquid inlet and outlet passages, a tubular member rotatable on the bearing about a vertical axis and communicating with said outlet passage, a receptacle on the tubular member rotatable therewith and having a liquid outlet passage discharging thereto, a valve housing connected with the tubular member and provided with a valve, an outlet conduit controlled by the valve and adapted to discharge liquid to the receptacle, and a supply conduit having its inlet end connected with the inlet passage of the bearing, the discharge end of said supply conduit being fixed relative to the bearing and terminating on the axis of rotation of the receptacle, said housing having a liquid inlet portion controlled by said valve and telescopically receiving the discharge end of said supply conduit and rotatable thereon upon rotation of the receptacle.

13. In dental apparatus, a support having a bearing thereon, a receptacle rotatable on said bearing, a valve head adapted to rotate with the receptacle, said valve head having liquid inlet and outlet passages and provided with a valve for controlling the flow of the liquid through said passages, said outlet passage being adapted for communication with the receptacle, and a liquid

supply conduit having its discharge end fixed on the axis of rotation of the receptacle and discharging to the inlet passage of the valve head.

14. In dental apparatus, a support having a bearing thereon, a receptacle rotatable on said bearing, a valve head adapted to rotate with the receptacle, said valve head having liquid inlet and outlet passages and provided with a valve for controlling the flow of the liquid through said passages, said outlet passage being adapted for communication with the receptacle, and a liquid supply conduit mounted exteriorly of and fixed relative to the bearing and having its discharge end disposed on the axis of rotation of the receptacle and discharging to the inlet passage of the valve head.

15. In dental apparatus, a support having a bearing thereon, a receptacle rotatable on said bearing, a valve head adapted to rotate with the receptacle, said valve head having liquid inlet and outlet passages and provided with a valve for controlling the flow of the liquid through said passages, said outlet passage being adapted for communication with the receptacle, and a supply conduit discharging through the bearing and having an extension disposed externally of the bearing, the outlet end of the extension being fixed relative to the bearing on the axis of rotation of the receptacle and discharging to the inlet passage of the valve head.

16. In dental apparatus, a support having a bearing thereon, a receptacle rotatable on said bearing, a valve head adapted to rotate with the receptacle, said valve head having liquid inlet and outlet passages and provided with a valve for controlling the flow of the liquid through said passages, said outlet passage being adapted for communication with the receptacle, said bearing having an axially disposed liquid discharge passage and having a supply conduit connected therewith, and a conduit fixed relative to and disposed exteriorly of said bearing, said conduit having its inlet end connected with the discharge passage of the bearing and its outlet end disposed on the axis of rotation of the receptacle and discharging to the inlet passage of the valve head.

17. In dental apparatus, a support having a bearing thereon provided with a liquid discharge passage, a supply conduit connected with said passage, a tubular member rotatable upon said bearing about a vertical axis, a receptacle on the tubular member communicating therewith, a valve head carried by said tubular member having inlet and outlet passages and provided with a valve for controlling the flow of the liquid through said passages, a discharge conduit leading from the outlet passage to the receptacle, and a conduit fixed relative to the bearing and having one end disposed axially thereof and connected with the inlet passage of the valve head and having its other end connected with the discharge passage of the bearing.

18. In dental apparatus, a support having a bearing thereon, provided with liquid inlet and outlet passages, a supply connection leading to said inlet passage, a tubular member having a receptacle thereon communicating therewith, said tubular member being rotatably mounted on said bearing about a vertical axis and communicating with the outlet passage of the bearing, a valve head carried by the tubular member and adapted to rotate therewith, said valve head having inlet and outlet passages and provided with a valve for controlling the flow of the liquid therethrough, means for conveying liquid from the valve head outlet passage to the receptacle, and a conduit having a fixed end disposed on the axis of rotation of the tubular member and connected with the inlet passage of the valve head, the other end of said conduit being connected with the inlet passage of the bearing.

19. In dental apparatus, a suport, a tubular member rotatable upon the support about a vertical axis, a receptacle on the tubular member having a liquid outlet passage discharging to the tubular member, a valve housing connected with the tubular member and provided with a valve, an outlet conduit controlled by the valve and adapted to discharge liquid to the receptacle, and a supply conduit having its discharge end fixed relative to the support and terminating on the axis of rotation of the receptacle, said housing having a liquid inlet portion controlled by said valve and telescopically receiving and rotatable upon the discharge end of said conduit upon rotation of the receptacle.

20. In dental apparatus, a tubular arm having a receptacle thereon communicating therewith, said arm having a liquid outlet portion formed for cooperation with a fixed bearing for supporting the arm for a swinging movement about a vertical axis, a support extending upwardly from the outlet end of the arm and provided with a valve head having a valve therein and a discharge conduit leading from the valve to the receptacle, said head having a tubular inlet portion adapted to receive a fixed outlet end of a connection for supplying liquid to the head for control by said valve, said tubular portion being disposed on the axis of rotation of the arm and adapted to rotate upon the outlet end of the supply connection when the arm is swung from one position to another.

21. In dental apparatus, a tubular arm having a receptacle thereon communicating therewith, said arm having a liquid outlet portion formed for cooperation with a fixed bearing for supporting the arm for a swinging movement about a vertical axis, a support extending upwardly from the outlet end of the arm and having a valve head thereon provided with valve means for controlling the discharge of liquid through the head, a receptacle on the support having a supply conduit connected with said valve head, and a second supply conduit connected with the head and discharging to the first mentioned receptacle, said head having a tubular inlet portion adapted to receive the outlet end of a connection for supplying liquid to the head for control by said valve means, said tubular portion being disposed on the axis of rotation of the arm and adapted to rotate upon the fixed outlet end of the supply connection when the arm is swung from one position to another.

22. In dental apparatus, a tubular arm having a receptacle thereon communicating therewith, said arm having a liquid outlet portion formed for cooperation with a fixed bearing for supporting the arm for a swinging movement about a vertical axis, a tubular support extending upwardly from the outlet end of the arm and having a portion offset relative to the axis of the outlet portion of said arm, a receptacle mounted on and discharging through the tubular support to the outlet portion of the arm, a valve head on the tubular support provided with outlet conduits one discharging to one of the receptacles and another to the other receptacle, valve means carried by the head for controlling said outlet

conduits, said valve head having a tubular inlet portion adapted to receive a fixed outlet end of a connection for supplying liquid to the head, said tubular portion lying opposite the offset portion of the tubular support and being disposed on the axis of rotation of the arm and adapted to rotate upon the fixed outlet end of the supply connection when the arm is swung from one position to another.

23. In dental apparatus, a pedestal having a part provided with a shoulder disposed in a plane at an angle to the horizontal, a liquid circulating unit including a support connected with and extending from said shoulder, and means associated with said shoulder adapted to intercept the liquid accumulating upon the exterior surfaces of the unit as a result of condensation and discharging downwardly thereon whereby to prevent the liquid from discharging upon the pedestal.

24. In dental apparatus, a pedestal having a water circulating unit secured upon the side wall thereof and extending therefrom, and means associated with the unit for intercepting the liquid accumulating upon the exterior surfaces of the unit as a result of condensation and discharging downwardly thereon whereby to prevent the liquid from discharging upon the pedestal.

25. In dental apparatus, a pedestal, a water circulating unit including a supporting element secured upon the side wall of the pedestal and extending therefrom, and a bead-like portion on said supporting element for intercepting the liquid accumulating upon the exterior surfaces of the unit as a result of condensation and discharging downwardly upon the unit and the supporting element whereby to prevent the liquid from discharging upon the pedestal.

26. In dental apparatus, a pedestal having an extension on its side wall, a water circulating unit including a supporting element connected with the extension and projecting therefrom, and a member interposed between the extension and the supporting element for intercepting liquid accumulating upon the exterior surfaces of the unit as a result of condensation and discharging downwardly upon the unit whereby to prevent the liquid from discharging upon said pedestal.

27. In dental apparatus, a pedestal having a laterally extending tubular member provided with a shoulder extending at an inclination to the horizontal, a bearing connected with said tubular member, a hollow arm mounted for rotation upon the bearing and having a receptacle communicating therewith, liquid supply and discharge conduits within the pedestal leading to and from the bearing, means for conveying liquid to the receptacle, said means including a conduit having a portion depending from the bearing and communicating with the supply conduit of the pedestal, and a part interposed between the bearing and said shoulder for intercepting the liquid accumulating upon the receptacle and the arm as a result of condensation and discharging downwardly upon the bearing, said part serving to deflect and discharge the liquid upon the depending portion of said conduit for discharge by the latter.

28. In dental apparatus, a pedestal having an extension thereon, a water circulating unit secured upon the extension including a tubular support having a receptacle communicating therewith, means for supplying liquid to the receptacle through the support including an outlet portion on the support and a supply pipe for the receptacle having a connection depending from said outlet portion and having a nut threaded thereon, and a member interposed between the extension and the tubular support having a yieldable depending part in engagement with the nut and permitting detachment of the latter from the outlet portion of the support without removal of said part, said member being adapted to intercept the liquid accumulating upon the exterior surfaces of the liquid circulating unit as a result of condensation, the depending part of said member serving to discharge the liquid upon said nut for discharge downwardly upon said connection.

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