Aug. 13, 1935. W. R. CUTHBERT 2,011,040

FOUNTAIN PEN DESK SET

Filed April 20, 1935

Fig. 1.

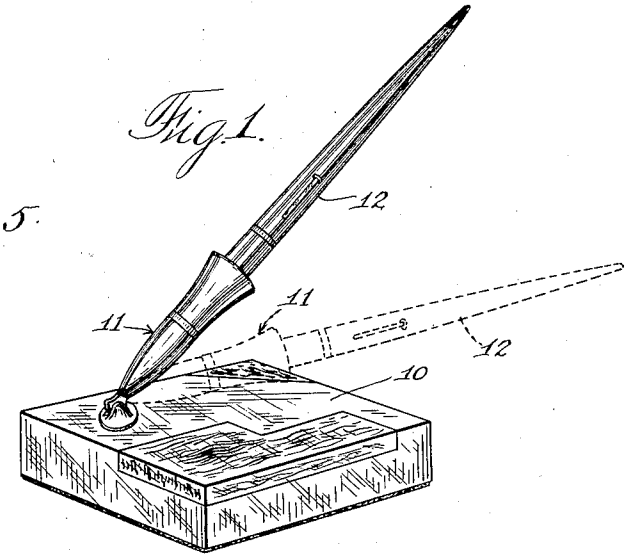


Fig. 5.

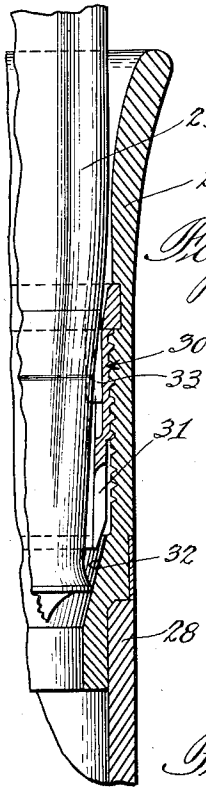


Fig. 2.

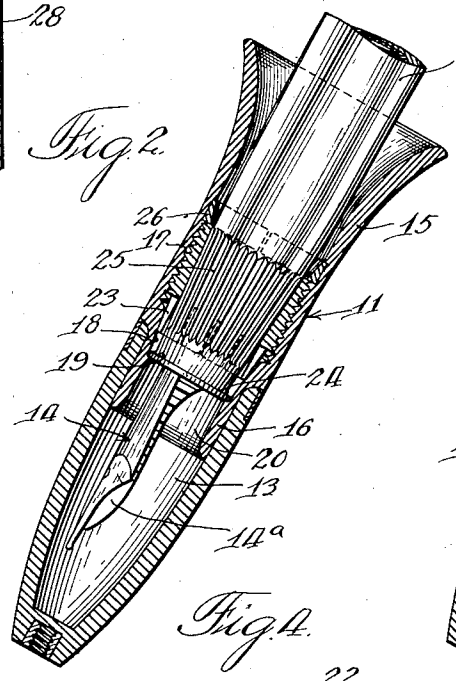


Fig. 3.

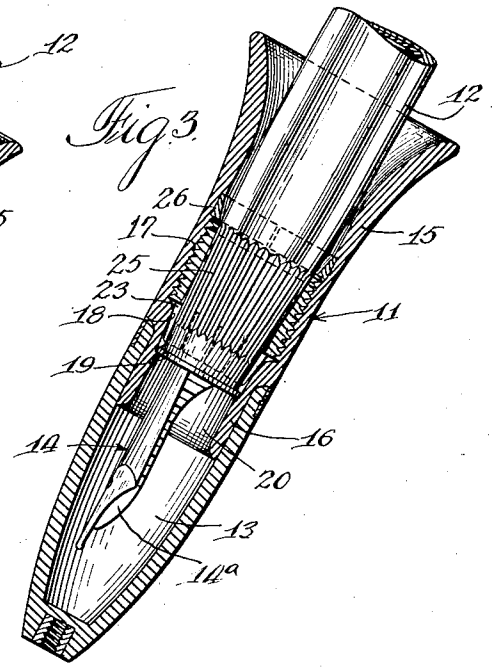
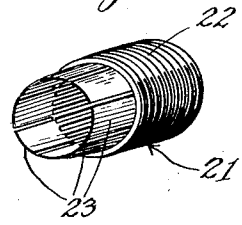


Fig. 4.



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Patented Aug. 13, 1935 2,011,040

UNITED STATES PATENT OFFICE

2,011,040

FOUNTAIN PEN DESK SET

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Application April 20, 1935, Serial No. 17,452

16 Claims. (Cl. 120—108)

This invention relates to a fountain pen desk set and has special reference to a device comprising a base for resting on a desk and a receptacle portion for holding a fountain pen in a desired position for convenience in use.

More particularly, this invention relates to a fountain pen desk set in which the fountain pen is equipped with connecting means adjacent the writing point end and is supported on a seat in an open-ended receptacle in a manner substantially to seal the writing point thereof within the closed end to prevent ink from drying on the writing point, there being means in the receptacle for cooperation with the connecting means of the fountain pen to prevent removal and to effect a positive seal thereof upon relative movement between the fountain pen and the receptacle. It will be understood that the fountain pen under normal conditions of more or less constant use is freely insertable into the receptacle to rest by its own weight on the seat therein so that a substantial seal of the writing point is effected and the fountain pen is freely removable for use in writing.

The primary use of the present invention is in the office where the need for a ready pen is frequent and the elimination of the usual cap for a fountain pen which is either screw-threaded or is of tight fit affords great convenience and results in a substantial saving in time. It is essential in such a device to provide for the free insertion and removal of the fountain pen during the frequent daily use thereof, although it is desirable at times during substantial periods of inactivity, to prevent the removal of the fountain pen from its position in the receptacle and to effect a positive seal thereof.

In most commercial desk sets, the receptacle is hingedly or pivotally mounted and it is just as desirable to lock the fountain pen in an upright position in readiness for use as it is to lock the fountain pen in its receptacle when pivoted to a position flat on the base in readiness for storing. It is also desirable to provide a very simple and convenient movement for effecting the locking of the fountain pen in the receptacle, and all of these features are desirably accomplished in the present construction.

One of the objects of this invention is to provide a desk set of the type indicated above in which a fountain pen is freely insertable into the receptacle to rest by its own weight on the shoulder to effect a substantial seal on the writing point and is freely removable for use in writing, a relative movement between the fountain pen and the receptacle preventing the removal and effecting a positive seal of the fountain pen when desired.

Other objects and advantages will hereinafter be more particularly pointed out, and for a more complete understanding of the characteristic features of this invention, reference may now be had to the following description when taken together with the accompanying drawing, in which latter:

Figure 1 is a perspective view of a fountain pen desk set embodying the features of this invention, the fountain pen and receptacle therefor being shown in changed positions;

Fig. 2 is a central vertical sectional view of the receptacle separated from the base and showing a portion of a fountain pen inserted therein, a pen gripper being shown in an inoperative position;

Fig. 3 is a view similar to Fig. 2 showing a changed position of the pen gripper to prevent removal of the fountain pen;

Fig. 4 is a perspective view of the pen gripper; and

Fig. 5 is an enlarged fragmentary sectional view of the receptacle showing a modified form of connecting means on the portion of the fountain pen shown therein.

Referring now more particularly to the drawing, a base 10 is provided and may be of any decorative material, such as plate glass, onyx, or the like, of various shapes and sizes and of such weight as to lend sufficient stability to support the receptacle 11 and fountain pen 12 in any inclined relation thereto.

The receptacle 11 is formed preferably of a pyroxylin product or of other well-known compositions and has a chamber 13 formed in the lower end thereof for receiving the writing point 14 and ink feeding means 14a of the fountain pen 12. The receptacle may be formed in two parts, the upper part 15 having a flared open end and having a reduced extension 16 which is telescopically received in the upper end of the lower part or chamber 13 of the receptacle. The provision of a receptacle formed in two parts is merely for convenience in manufacture and it is to be understood that a receptacle for performing the same desirable function may be made in a single piece. The lower end of the receptacle is provided preferably with means for effecting a pivotal and rotatable movement relative to the base.

An intermediate portion of the upper receptacle 15 is preferably provided with threads 17, from the lower portion of which an inclined surface 18 extends or converges to effect a cam surface when viewed in cross section. The lower end of the cam surface terminates in a shoulder 19 at the juncture of the converging bore with a reduced bore 20 in the extension 16.

Referring now more particularly to Figure 4, a gripping member 21 is shown and comprises an annular member having an externally thread-

ed portion 22 and a series of opposed resilient fingers 23 extending from one end thereof. A portion of the inner surface of the annular member is provided with longitudinally extending alternate ridges and grooves which, in the instance of the application, are serrations that taper from the one end of the annular member interiorly thereof to conform to the taper of the fountain pen which will now be described.

The fountain pen 12 is provided with a shoulder 24 at the writing point end thereof for seating on the shoulder 19 of the receptacle, the pen resting by its own weight on the shoulder to effect a substantial seal of the writing point within the chamber 13. The fountain pen is equipped with connecting means 25 which, in this instance, comprises a series of longitudinally extending alternate ridges and grooves for registration with the serrations on the interior of the gripping member 21. The fountain pen is tapered at each end to provide comfort in writing and attractiveness in appearance, the grooves and ridges preferably conforming to the taper.

The threads 22 of the gripping member 21 engage with the threads 17 of the receptacle, the gripping member being limited in its longitudinal movement with respect to the receptacle by a split annular band 26 which is expanded and cemented or otherwise secured in position within the receptacle and preferably within a recessed portion therein. The band 26 is preferably provided with a bore which converges when viewed in cross section, the diameter at its upper end being preferably substantially the same as the adjacent bore of the receptacle and converging inwardly therefrom to a reduced diameter which is substantially the same as the adjacent diameter of the bore of the gripping member 21. The nature of this construction is such as to facilitate the introduction of the fountain pen into the receptacle.

Referring now more particularly to Figure 2, the gripping member, being preferably formed of rubber or other resilient material, is held in the receptacle, the threads 22 engaging the threads 17. The fingers 23 of the gripping member 21 engage the upper portion of the cam surface 18 and the gripping member is in its uppermost position as limited by the annular band 26. The diameter or the space between the opposed gripping fingers is sufficient to permit the free insertion or removal of the pen including the shoulder 24 to or from its seat 19 in the receptacle. Likewise, the alternate ridges and grooves, which extend longitudinally of the pen, are of such a nature as to register in the alternate ridges and grooves of the gripping fingers, the tops of the ridges being preferably sharp so as to facilitate registration and to necessitate no adjustment in the insertion or removal of the fountain pen from the receptacle. Therefore, the fountain pen is freely insertable into the receptacle to rest by its own weight on the shoulder to effect a substantial seal thereby of the writing point and likewise the fountain pen is freely removable when it is desired to use the same in writing. Also, the freedom of fit obviates any tendency to create a suction to draw ink from the pen when it is removed.

However, referring now more particularly to Figure 3, when it is desired to prevent the removal of the fountain pen from the receptacle and to effect a positive seal of the writing point end either when the receptacle is in an upstanding position or flat on its base, the fountain pen is given a partial rotation (in commercial practice, about a half or three quarters of a revolution). When the gripping member 21 is rotated, the threads effect a longitudinal movement of the gripping member to vary the diameter or the space between the opposed gripping fingers as the gripping fingers move down the cam surface to grip the fountain pen and prevent removal thereof and to urge the shoulder of the fountain pen to seat on the shoulder of the receptacle. When it is desired to again present the fountain pen for normal condition of ready use, the fountain pen is axially rotated to rotate in turn the gripping member 21, whereby the fingers move upwardly on the cam surface to release the tension thereon, the inherent resiliency of the fingers effecting an expansion thereof as limited by the cam surface to permit the removal of the pen.

The receptacle shown in Fig. 5 is substantially the same as that previously described, it being preferably formed of two parts—a flared open-ended upper portion 27 and a closed lower portion 28 for sealing the writing point end and ink-feeding mechanism of the fountain pen 29. An intermediate portion of the upper receptacle is provided with internal threads for engaging the external threads of the rubber, metal or other resilient annular gripping member 30, the lower end of the gripping member being provided with fingers 31 for engaging a tapered seat 32 of the receptacle 27 as the gripping member is rotated in one direction. Such rotation of the gripping member causes a longitudinal movement thereof, the inclined surface urging the fingers radially inwardly to engage the barrel of the fountain pen. The shoulder of the fountain pen finds its seat on the inclined surface 32 and is held in intimate contact therewith by the resilient fingers 31, thereby effecting a positive sealing of the pen nib and ink feeding mechanism of the fountain pen.

The fountain pen of the previously described embodiment is provided with a series of longitudinally extending alternate ridges and grooves for engaging registering ridges and grooves of the gripping member. These ridges and grooves are very desirable since, besides their normal function, they provide a grip for the fingers in writing. However, where it is desired to employ a smooth surface, a key 33 may be inserted in the side of the fountain pen to be held by friction therein, the key preferably being of V-shape to engage one of the grooves of the longitudinally extending alternate ridges and grooves of the gripping member 30. Although but a single groove is necessary in the gripping member to engage the key, it has been found more desirable to employ a plurality thereof so as to obviate the necessity of finding the proper registration.

It is understood, of course, that the type of connecting means employed may be varied at will, the invention herein residing in the provision of means in the receptacle for cooperation with any type of connecting means to effect a positive seal and to prevent removal of the fountain pen from the receptacle by a relative movement between the fountain pen and the receptacle, the fountain pen under normal conditions of use being freely insertable into the receptacle to rest by its own weight on a shoulder therein to effect a substantial seal of the writing point and being freely removable for use in writing.

While but a single embodiment of this inven-

tion is herein shown and described, it is to be understood that various modifications thereof may be apparent to those skilled in the art without departing from the spirit and scope of this invention and, therefore, the same is only to be limited by the scope of the prior art and the appended claims.

I claim:

1. A fountain pen desk set in which the fountain pen is equipped with connecting means adjacent the writing point end thereof, a receptacle for supporting the fountain pen, a resilient annular member having means for cooperation with the connecting means and having longitudinal movement in said receptacle, the connecting means of the fountain pen permitting relative slidable engagement longitudinally of said annular member in a normal condition of use and preventing relative rotary movement therebetween, and means acting on said annular member during longitudinal movement thereof for varying the diameter thereof to grip and to prevent removal of the fountain pen therefrom by mere rotatable movement in one direction of the fountain pen.

2. A fountain pen desk set in which the fountain pen is equipped with connecting means adjacent the writing point end thereof, a receptacle for supporting the fountain pen, a resilient annular member having means for cooperation with the connecting means and having longitudinal movement in said receptacle, the connecting means of the fountain pen permitting relative slidable engagement longitudinally of said annular member in a normal condition of use and preventing relative rotary movement therebetween, and cam means fixed relative to said receptacle for acting on said annular member during longitudinal movement thereof for varying the diameter thereof to grip and to prevent removal of the fountain pen therefrom by mere rotatable movement in one direction of the fountain pen.

3. A fountain pen desk set in which the fountain pen is equipped with connecting means adjacent the writing point end thereof, a receptacle for supporting the fountain pen, an annular member having means for cooperation with the connecting means and having longitudinal movement in said receptacle, the connecting means of the fountain pen permitting relative slidable engagement logitudinally of said annular member in a normal condition of use and preventing relative rotary movement therebetween, said annular member having resilient opposed fingers extending therefrom, and means acting on said fingers during longitudinal movement of said annular member for varying the space between said fingers to grip and to prevent removal of the fountain pen therefrom by mere rotatable movement in one direction of the fountain pen.

4. A fountain pen desk set in which the fountain pen is equipped with connecting means adjacent the writing point end thereof, a receptacle for supporting the fountain pen, a resilient annular member having means for cooperation with the connecting means and having threaded engagement in said receptacle for effecting relative rotary and longitudial movement therebetween, the connecting means of the fountain pen permitting relative slidable engagement longitudinally of said annular member in a normal condition of use and preventing relative rotary movement therebetween, and means acting on said annular member for varying the diameter thereof to grip and to prevent removal of the fountain pen therefrom by mere rotatable movement in one direction of the fountain pen.

5. A fountain pen desk set in which the fountain pen is equipped with connecting means adjacent the writing point end thereof, a receptacle for supporting the fountain pen, a resilient annular member having means for cooperation with the connecting means and having threaded engagement in said receptacle for effecting relative rotary and longitudinal movement therebetween, the connecting means of the fountain pen permitting relative slidable engagement longitudinally of said annular member in a normal condition of use and preventing relative rotary movement therebetween, and means operative upon the longitudinal movement of said annular member for varying the diameter thereof to grip and to prevent removal of the fountain pen therefrom by mere rotatable movement in one direction of the fountain pen.

6. A fountain pen desk set in which the fountain pen is equipped with connecting means adjacent the writing point end thereof, a receptacle for supporting the fountain pen, an annular member having means over the inner surface thereof for cooperation with the connecting means and having external means for engagement with said receptacle for effecting relative rotary and longitudinal movement therebetween, the connecting means of the fountain pen permitting relative slidable engagement longitudinally of said annular member in a normal condition of use and preventing relative rotary movement therebetween, said annular member having resilient opposed fingers extending therefrom, and cam means operative upon the longitudinal movement of said annular member for varying the space between the fingers thereof to grip and to prevent removal of the fountain pen therefrom by mere rotatable movement in one direction of the fountain pen.

7. A fountain pen desk set in which the fountain pen is equipped with connecting means adjacent the writing point end thereof, a receptacle for supporting the fountain pen, an annular member having means over the inner surface thereof for cooperation with the connecting means and having external means for engagement with said receptacle for effecting relative rotary and longitudinal movement therebetween, the connecting means of the fountain pen permitting relative slidable engagement longitudinally of said annular member in a normal condition of use and preventing relative rotary movement therebetween, said annular member having resilient opposed fingers extending therefrom, and a portion of the bore of the receptacle converging when viewed in cross-section to effect a cam surface and force the resilient opposed fingers inwardly to grip and to prevent removal of the fountain pen therefrom by mere rotatable movement in one direction of the fountain pen.

8. A fountain pen desk set in which the fountain pen is equipped with connecting means adjacent a shoulder at the writing point end thereof, an open-ended receptacle having a seat for supporting the shoulder of the fountain pen and serving to substantially seal the writing point thereof at the closed end of the receptacle to prevent ink from drying on the writing point, a resilient annular member having means for cooperation with the connecting means and having threaded engagement in said receptacle adjacent the shoulder thereof for effecting relative rotary

and longitudinal movement therebetween, the connecting means of the fountain pen permitting relative slidable engagement longitudinally of said annular member in a normal condition of use and preventing relative rotary movement therebetween, and means acting on said annular member for varying the diameter thereof to grip and to prevent removal of the fountain pen therefrom by mere rotatable movement in one direction of the fountain pen and to maintain the fountain pen in its sealed condition irrespective of the position of the receptacle.

9. A fountain pen desk set in which the fountain pen is equipped with connecting means adjacent a shoulder at the writing point end thereof, an open-ended receptacle having a seat for supporting the shoulder of the fountain pen and serving to substantially seal the writing point thereof at the closed end of the receptacle to prevent ink from drying on the writing point, means in said receptacle for cooperation with the connecting means to prevent removal of the fountain pen therefrom by mere rotatable movement in one direction of the fountain pen relative to the receptacle, the fountain pen under normal conditions of use being freely insertable into the receptacle to rest by its own weight on said shoulder to effect a substantial seal of the writing point and being freely removable for use in writing.

10. A fountain pen desk set in which the fountain pen is equipped with longitudinally extending alternate ridges and grooves adjacent the writing point end thereof, a receptacle for supporting the fountain pen, an annular member having alternate longitudinal ridges and grooves registering with those of said fountain pen and having threaded engagement with said receptacle for effecting relative rotary and longitudinal movement therebetween, said ridges and grooves of the fountain pen permitting relative slidable engagement longitudinally of said annular member in a normal condition of use and preventing relative rotary movement therebetween, resilient fingers extending from said annular member, and means acting on said fingers for movement thereof to grip and to prevent removal of the fountain pen therefrom by mere rotatable movement in one direction of the fountain pen.

11. A fountain pen desk set in which the fountain pen is equipped with connecting means adjacent the writing point end thereof, a receptacle for supporting the fountain pen, an annular member having means for cooperation with the connecting means and having rotary and longitudinal movement in said receptacle, the connecting means of the fountain pen permitting relative slidable engagement longitudinally of said annular member in a normal condition of use and preventing relative rotary movement therebetween, resilient fingers extending from said annular member, and means acting on said fingers for movement thereof to grip and to prevent removal of the fountain pen therefrom by mere rotatable movement in one direction of the fountain pen.

12. A fountain pen desk set in which the fountain pen is equipped with connecting means adjacent the writing point end thereof, a receptacle for supporting the fountain pen, an annular member having means for cooperation with the connecting means and having rotary and longitudinal movement in said receptacle, the connecting means of the fountain pen permitting relative slidable engagement longitudinally of said annular member in a normal condition of use and preventing relative rotary movement therebetween, resilient fingers extending from said annular member, and a cam surface on said receptacle for acting on said fingers during the longitudinal movement of said annular member to grip and to prevent removal of the fountain pen therefrom by mere rotatable movement in one direction of the fountain pen.

13. A fountain pen desk set in which the fountain pen is equipped with connecting means adjacent the writing point end thereof, a receptacle for supporting the fountain pen, an annular member having means for cooperation with the connecting means and having rotary and longitudinal movement in said receptacle, means for limiting said longitudinal movement in one direction, the connecting means of the fountain pen permitting relative slidable engagement longitudinally of said annular member in a normal condition of use and preventing relative rotary movement therebetween, resilient fingers extending from said annular member, and means acting on said fingers for movement thereof to grip and to prevent removal of the fountain pen therefrom by mere rotatable movement in one direction of the fountain pen.

14. A fountain pen desk set in which the fountain pen is equipped with connecting means adjacent the writing point end thereof, a receptacle for supporting the fountain pen, a rubber annular member having means for cooperation with the connecting means and having rotary and longitudinal movement in said receptacle, the connecting means of the fountain pen permitting relative slidable engagement longitudinally of said annular member in a normal condition of use and preventing relative rotary movement therebetween, one end of said annular member being slit to provide a plurality of fingers, and means acting on said fingers for varying the diameter thereof to grip and to prevent removal of the fountain pen therefrom by mere rotatable movement in one direction of the fountain pen.

15. A fountain pen desk set in which the fountain pen is equipped with connecting means adjacent a shoulder at the writing point end thereof, an open-ended receptacle having a seat for supporting the shoulder of the fountain pen and serving to substantially seal the writing point thereof at the closed end of the receptacle to prevent ink from drying on the writing point, means in said receptacle for cooperation with the connecting means to prevent removal of the fountain pen therefrom by mere rotatable relative movement in one direction between the fountain pen and the receptacle, the fountain pen under normal conditions of use being freely insertable into the receptacle to rest by its own weight on said shoulder to effect a substantial seal of the writing point and being freely removable for use in writing.

16. A fountain pen desk set comprising a fountain pen, an open-ended receptacle for supporting said fountain pen, cooperating means on said fountain pen and in said receptacle for substantially sealing the writing point of said fountain pen to prevent ink from drying on the writing point under normal conditions of use when the fountain pen rests in the receptacle by its own weight, and further cooperating means on said fountain pen and in said receptacle for locking said pen in said sealed position by mere relative rotary movement in one direction between said fountain pen and said receptacle.

WILLIAM R. CUTHBERT.