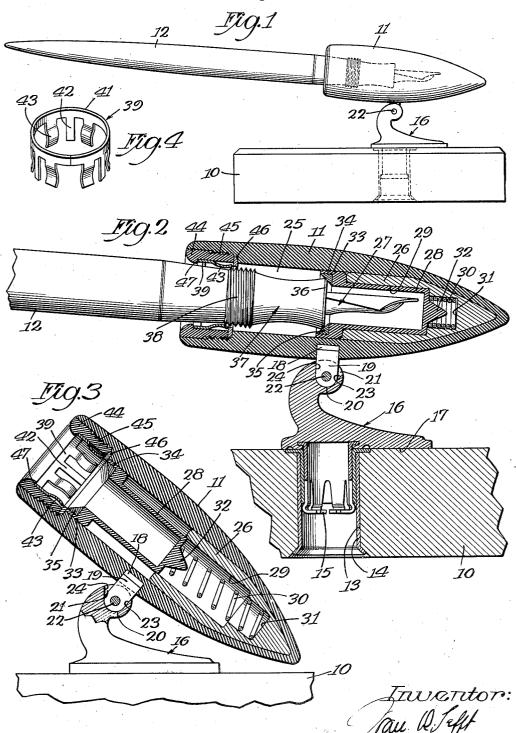
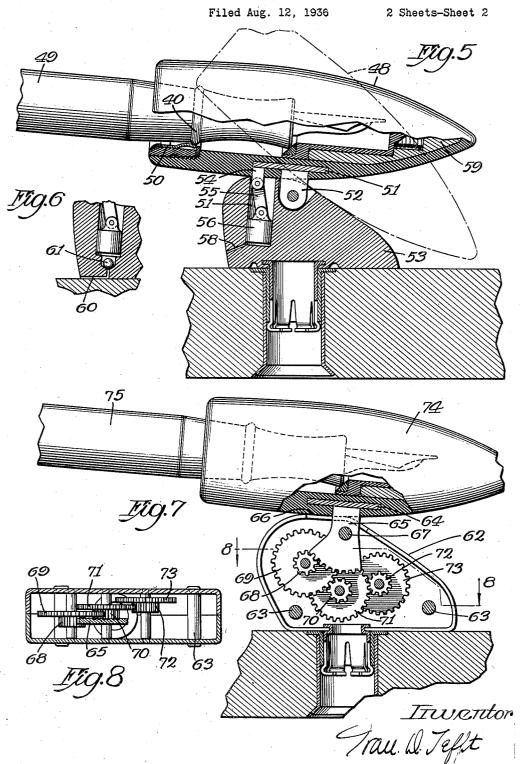
DESK SET

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2 Sheets-Sheet 1



DESK SET



## UNITED STATES PATENT OFFICE

2,110,007

DESK SET

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27 Claims. (Cl. 120-108)

My invention relates to desk sets adapted particularly for supporting fountain pens in writing condition upon desks or other suitable surfaces.

In various desk set devices heretofore devised. 5 the pen-receiving receptacle, whether stationary or movable, is so mounted that it will support the fountain pen in an upright position with its writing end projecting downwardly into the receptacle, the angle of support generally approxi-10 mating 45 degrees. In most cases, even though the receptacle may be moved to a lower angle or position, this is not done in the general use of the desk set because of the inconvenience involved. In the use of such desk set devices, con-15 siderable difficulty has been experienced due to the leakage of ink into the pen-receiving recep-This leakage is due mainly to the fact that the fountain pen is supported by the penreceiving receptacle in such a way or upright 20 condition that practically the full weight of the column of ink within the fountain pen is directed toward the writing end of the pen, and an increase in the temperature of the air in the air space in the ink reservoir of the fountain pen 25 directly above the column of ink, plus the weight of the column of ink, causes the ink to leak or flow from the writing end of the pen into its supporting receptacle. While this condition may be minimized in some of the movable receptacle 30 types of desk sets by moving the receptacle down to a substantially horizontal position, yet the very fact that movement of the receptacle must be accomplished by manual means this results in neglect in this connection.

More particularly, it is a well known fact that the contents of the fountain pen reservoir are subject to temperature changes and that increase of temperature will result in a natural expansion of the air above the ink in the reservoir, and in 40 the fluid ink itself, whereby, under an extreme temperature rise condition, the forces tending to hold the ink within the reservoir are overcome and the ink is caused to flow toward the writing point resulting in the leakage above mentioned. For example, in the spring, fall and winter of the year when the temperature of office buildings is permitted to drop during the night from 20 to 30 degrees and is then raised again in the morning, 50 there is a general tendency for practically all desk set pens in such buildings to leak badly, with the result that fountain pen dealers are constantly confronted with numerous complaints and service calls during these periods with re-55 spect to desk set pens that are actually in perfect operating order but are nevertheless, subject to the foregoing objectionable condition.

One of the objects of my invention is to provide an improved fountain pen desk set wherein the foregoing objectionable conditions are practically eliminated.

Another object of my invention is to provide a desk set which includes a movable pen-receiving receptacle so mounted that when a fountain pen is inserted therein, it automatically assumes 10 a nearly horizontal position wherein the weight of ink is substantially removed from the writing point end of the pen thereby minimizing tendency of the pen to leak due to the temperature change conditions above stated, the arrangement being 15 further that, when the fountain pen is removed from the receptacle for writing or other purposes, the pen-receiving receptacle automatically assumes an upright position for ready return of the fountain pen thereto. This feature of my in- 20 vention insures proper positioning of the receptacle without depending upon the human element, whereby desk set fountain pen operation is greatly improved and maximum performance is assured at all times.

A further object is to provide in a desk set of the foregoing character counterweight means for insuring immediate movement of the pen-receiving receptacle to its upright position. When the pen is removed therefrom, the action of the 30 counterweight means is overcome by the weight of the pen when it is inserted within the receptacle. In certain cases, it may be desired to retard the movement of the pen-receiving receptacle and, in that case, I provide novel brake 35 means to that end.

It has been found from practical experience that, although it is desirable to lower the penreceptacle when the pen is placed therein, it should not be lowered to or below a horizontal position for proper results since then the ink would tend to flow away from the writing point, whereas it should tend to flow toward the writing point of the pen in order that the writing point end be kept moist with ink ready for instant writing. 45

A more specific object is, therefore, to provide a desk set including a pen-receiving receptacle mounting wherein the pen-receiving receptacle, when the fountain pen is inserted therein, is adapted to move downwardly to approximately a 50 5 degree or less angle with respect to its supporting base, and which is arranged to automatically assume an upright position of approximately 45 degrees with respect to the supporting base when the fountain pen is removed therefrom to position 55

the receptacle for again receiving the fountain pen. It has been found that these angular positions are substantially ideal for best desk set performance; but it is to be understood that they may be varied without departing from my invention.

Also, in practically all prior desk set devices, the pen-receiving receptacle includes supporting and sealing means intended to seal the writing point of the pen from the air to prevent drying out of the ink thereon. This sealing means generally takes the form of a flat or tapered shoulder against which the end of the pen section of the fountain pen abuts with a pressure afforded only by the weight of the pen, and it has been found, for various reasons, that this type of sealing means does not provide as positive a seal as desired whereby there is a tendency for the ink on the writing point end of the pen to dry out.

Another object of my invention is to provide an improved means for sealing the writing point end of the fountain pen within the receptacle apart from the atmosphere to positively prevent currents of air from drying out the ink thereon.

Still another object is to provide a seal means for the pen-receiving receptacle of the desk set which not only assures a positive seal engagement between the sealing means within the receptacle and the shoulder at the end of the pen section of the pen, but it also provides a pressure seal which maintains the sealing engagement to positively prevent the passage of air to and from the writing point end of the pen when it is mounted within the receptacle.

35 A further object is to provide means for positively holding the fountain pen in its sealed position within the pen-receiving receptacle, such holding means being preferably of a character adapted to indicate to the user when the fountain pen is fully inserted and sealed within the receptacle.

Additional objects are to provide a desk set possessing the foregoing advantages and which is of minimum height, facilitating the use of the 45 same on a desk, readily permitting the storage of the same in a desk drawer, or the like, and avoiding ready tipping of the same should it be accidentally contacted by the user when working at his desk; to provide a desk set mounting 50 wherein the pen receiving receptacle and its contained pen are held at such an angle that, while the weight of the ink is substantially removed from the writing point end of the pen, the receptacle is at such an angle that condensate, or 55 the like, that may find its way into the receptacle, will flow to the bottom thereof rather than along the walls where it may be contacted by the fountain pen and, in turn, soil the hands of the user; and to provide a desk set structure 60 which, while possessing the foregoing advantages and features, is quite simple in construction, is inexpensive to manufacture, and is adapted to give satisfactory service for a long period of time. Other objects and advantages will become ap-65 parent as this description progresses and by reference to the drawings wherein,-

Figure 1 is a side elevational view of one form of desk set structure embodying my invention;
Fig. 2 is an enlarged sectional view taken longitudinally through the pen-receiving receptacle of Fig. 1, the receptacle being shown in the position which it assumes when the fountain pen is inserted therein;

Fig. 3 is a view similar to Fig. 2 except that

the receptacle is shown in the position that it assumes when the pen is removed therefrom;

Fig. 4 is a detached perspective view of the latching collar or grip member shown in Figs. 2 and 3 for retaining the fountain pen within the receptacle in its sealed condition;

Fig. 5 is a vertical sectional view of a modified form of desk set embodying my invention, the receptacle being shown in full lines in the position which it assumes when the pen is inserted 10 therein, and in dotted lines in the position it assumes when the fountain pen is removed therefrom:

Fig. 6 is a fragmentary sectional view of a modified form of mounting for the pen-receiv- 15 ing receptacle;

Fig. 7 is another view, partially in vertical section, illustrating a further form of desk set embodying my invention; and

Fig. 8 is a section taken substantially in line 20 8—8 of Fig. 7.

The desk set shown in Figs. 1 to 4, inclusive, includes a portable base 10 adapted to rest flatwise upon a desk or other suitable surface, which base is of sufficient area and weight to serve as a 25 counterbalancing support for a pen-receiving receptacle II and its contained pen 12. The base 10 is provided at any convenient position with an opening 13 in which is mounted a metal sleeve 14 for slidably and rotatably receiving a split 30 sleeve retainer member 15 which is secured to and depends from a receptacle mounting bracket or member 16 having an enlarged bottom portion with a flat surface 17 adapted to extend flatwise over the top of the sleeve 14 and base 10 around 3! the opening 13. The structure just described is similar to that disclosed in Letters Patent No. 1,956,084, issued on April 24, 1934, to Ivan D. Tefft, and the same, therefore, need not be described further herein.

The base-mounted bracket member is is adapted to movably support the pen receiving receptacle [1 (Figs. 2 and 3). The receptacle [1 is of semi-elliptical shape in longitudinal section so that its exterior surface takes a some- 4 what conical shape with its larger end open to receive the fountain pen 12 and its other end closed. The receptacle II is so supported that it is movable between a so-called lowered or pencontaining position at an angle approximately 5 5 degrees with respect to the horizontal top of the base 10 and a so-called raised or pen removed position at approximately 45 degrees wth respect to the horizontal or the top of the base is. To this end, the under wall portion of the pen-re- 5 ceiving receptacle 11 has molded, or otherwise secured, therein a pair of similar bar members 18 having depending arms 19 with rounded end portions 20 adapted to seat within an upwardlyopening recess 21 in the upper end of the bracket 6 thember 16. The bottom of the recess 21 is rounded similarly to lower ends of the bar arms to accommodate rocking or rotational movement of bar arms 19 within the recess 21. These bar arms 19 are pivotally secured within the recess 6 21 by a cross pin 22 and, in this way, the pen receiving receptacle is secured to the bracket 16 for the hinging or rocking movement hereinabove mentioned. The pen-receiving receptacle II is also in this way detachably mounted upon the 7 base 16, and it is capable of assuming various positions of rotation around the base by virtue of the rotatable mounting of the member 16 above described. In this way, the receptacle may assume its intended pen-holding or pen-removed 7

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position at any rotative position to which it may be moved with respect to the base.

As it has already been pointed out, my invention contemplates a receptacle mounting of a character adapted to limit movement of the receptacle ! from a position wherein it is disposed approximately 5 degrees from the horizontal to a position wherein it is disposed at approximately 45 degrees with respect to the hori-10 zontal, and vice versa. To that end, the bracket recess 21 is provided with end walls 23 and 24 serving as stops against which the opposite edges of the bar arms 19 contact, as clearly illustrated in Figs. 2 and 3. More particularly, the end wall 15 24 of the recess 21 is inclined from the vertical approximately 5 degrees and the end wall 23 is disposed at an angle of approximately 45 degrees from the horizontal so that, with the median line of the bar arms 19 disposed at right angles to the 20 axis of the receptacle 11, the receptacle movement limits are, respectively, approximately between 5 degrees and 45 degrees. It will be understood that the limits of movement specified, while being the preferable ones, may be varied some-25 what without departing from my invention, the requirements being that the axis of the receptacle when in lowered position will be inclined slightly above the horizontal (may be slightly less or slightly more than 5 degrees) so that there is a 30 tendency for the ink to flow toward the writing point of the pen, and the other or raised limit will be less than the vertical (may be slightly more than or less than 45 degrees) to permit of ready return of the pen to the receptacle after 35 it has been removed therefrom.

The pen-receiving receptacle II is constructed in such a way that when a fountain pen 12 is inserted therein, it will automatically, under the weight of the pen, move down to its slightly-40 above horizontal position of Fig. 2 and, when the pen is removed therefrom, it will assume its raised position of Fig. 3. Specifically, the receptacle 11 is provided with a pen-receiving chamber 25 closed at one end and open at the other, and its closed 45 end is provided with a weight member or element 26 formed of any suitable material and of sufficient weight to act as a counterweight for the pen 12 when it is inserted into the receptacle (Fig. the weight of the pen being sufficient to over-50 come the effect of the weight 26 so that the receptacle will properly move to its lowered position. The weight 26 is, on the other hand, sufficiently heavy to quickly move the receptacle to its raised position of Fig. 3 when the pen is re-55 moved therefrom.

Another feature of my invention has to do with a novel means for sealing, and holding sealed, the writing end portion 27 of the fountain pen within the receptacle. In carrying out this fea-60 ture, I provide a cylindrical cup member 28 of sufficient diameter to freely receive the writing end portion of the pen, which cup member is slidably mounted within a bore 29 formed within the. weight member 26. This cup member 28 is con-65 tinuously urged in outward direction by a coil spring 30 mounted in a somewhat smaller recess 31 within the weight 26 at the inrer end of the cup 28 and bearing against the bottom of the cup. The spring and cup are maintained in 70 proper assembled relation by a conically shaped projection 32 on the inner end of the cup which extends within the spring.

The outer end of the cup is provided with an enlarged head 33 which is slidable along and is 75 guided by the inner wall of the receptacle cham-

ber 25 whereby the cup is substantially maintained in axial alignment with the axis of the receptacle and the fountain pen 12 inserted therein.

The outer or enlarged end of the cup 28 is provided with a shelf-like recess 34 in which there is secured a relatively soft and pliable, rubber seat member 35 which has a uniformly beveled, continuous and annular seat portion extending throughout the circumference of the cup. This 10 soft and pliable seat member is adapted to be engaged by the pen shoulder or end 36 of the pen section 37, and there is a tendency for the pen section shoulder to imbed itself slightly within the seat member and form a perfect seal, 15 notwithstanding irregularities in the parts, between the pen and cup member 28.

For proper sealing purposes, it is desirable that the pen 12 be extended inwardly within the receptacle and against the seat 35 sufficiently to 20 place the spring 30 under the tension necessary to effect a pressure-seal contact between the pen shoulder 36 and the seat 35. In accordance with my invention, means are provided that not only permit of this relationship of parts, but they 25 are maintained in that position. Specifically, I provide within the receptacle a spring latch type gripping member or collar which is adapted to operatively engage the pen to hold it within the receptacle against the pressure of spring 30, as 30 shown in Fig. 2. To this end, the pen 12 is provided, adjacent the juncture of the pen section and barrel thereof with an annular enlargement 38 which is adapted to cooperate with a springfingered, ring-type latch member 39 mounted in 35 the outer end of the receptacle chamber 25. annular projection 38 may take any suitable form such as the cap thread ring 38 of Figs. 1 and 2 or an annular bead 40, or the like, such as shown in Fig. 5.

The latch ring or grip collar 39 comprises an annular band portion 4t having a plurality of straight or positioning fingers 42 and alternating pen engaging spring fingers 43 depending therefrom. The spring fingers 43 are bowed slightly 45 inward presenting a rounded surface extending inwardly of the ring slightly in the path of the pen so that the same may be sprung readily outward when the raised ring-like portion 38 (or 40) of the pen passes thereby. The member 39 is 50 supported in the outer end of the receptacle by a ring-like cap member 44 which is provided with threads 45 adapted to engage an internally threaded receptacle wall portion spaced slightly inward from the open end of the receptacle. A 55 ring-like washer formed of any suitable material is disposed within the receptacle between the inner end of the grip member supporting ring 44 and the adjacent receptacle wall, the width of the rim of such washer being wide enough to 60 extend slightly inward beyond the wall of the receptacle and the ring cap member 44. The inwardly projecting part of the washer member 46 serves as a seat for the lower ends of the straight legs 42 of the grip member 39, and it is 65 sufficiently spaced away from the inner shoulder 47 at the outer end of the cap ring 44 that the grip member through its band and leg portions 41, 42 is positively positioned within the end of the receptacle with the spring legs in position to yield- 70 ably engage the pen. The washer 46 also, as will be observed in Fig. 3, serves as a stop for the outer end of the cup 28 when the pen is removed from the receptacle.

In the use of the structure so far described, 75

assuming that the pen has been removed from the receptacle, the receptacle will assume the position shown in Fig. 3 or a position at approximately 45 degrees from the horizontal due to the action of the weight member 26. When the pen is inserted within the receptacle, its writing end portion is passed into the cup 28 and, as this is done, the pen shoulder 36 engages the seat 35 and moves the cup 28 in-10 wardly against the action of the spring 30. As inward movement of the pen is continued, the enlarged barrel or threaded portion 38 flexes the spring fingers 43 outwardly and slips past the same, and these spring fingers snap in be-15 hind the portion 38 latching or holding the pen in that position until sufficient pressure is again applied to it by the user to flex the fingers 43 enough to withdraw the enlarged portion 38 therepast. When the pen has been inserted to 20 the extent just described (Fig. 2), the cup 28 is moved to its fully inward position with the spring 30 substantially fully compressed and the pen shoulder 36 engaged with the soft rubber seat 35 of the cup under maximum pressure 25 condition. At this time, the shoulder 36 is slightly imbedded in the cup seat, and sufficiently so to completely seal the interior of the cup, which now contains the writing point end 27 of the pen, to completely exclude the at-30 mosphere therefrom and avoid air currents which would tend to dry out the ink at the writing point end of the pen. After the pen has been thus inserted and is released by the operator, it will move down to the position of Fig. 2 where it will 35 remain until its use is desired. During this time, the writing point end of the pen will be maintained moist with ink ready for instant writing when the pen is next removed from the receptacle. The pen will be maintained in this con-40 dition with the minimum tendency for the pen to leak and smear, due to temperature changes and other conditions above more fully explained. Also, this arrangement has been found to be one in which the user is quite positively informed 45 that the pen has been properly returned to the receptacle to maintain the desired condition sought. That is to say, as the pen is inserted and is moved into its "home" position, the snapping of the spring fingers 43 behind the pen 50 portion 38 is felt or indicated to the user as the 'home" position.

My invention may take various forms other than that already described. One illustration of another form is shown in Fig. 5 wherein the 55 receptacle 48 is similar to the receptacle 11 of Figs. 2 and 3, but the pen 49 is provided with a ring or bead portion 40, instead of the threaded portion of Fig. 2, for snap engaging the ring grip member 50. Also, in this form, I provide 60 means for retarding the movement of the receptacle 48 to its lowered position when the pen 49 is inserted therein. More particularly, the receptacle 48 has a bar member 51 molded, or otherwise secured, in the wall thereof, and  $_{65}$  this bar member is provided with one or more depending arms 52 that are pivotally connected with a base mounted bracket 53 in a manner similar to that described in connection with the previous form. The bar member 51 is also pro-70 vided with a depending finger 54 which is connected to a link 55. The link 55 is, in turn, pivotally connected to a piston-like member 56 slidably mounted within a cylindrical bore 57 which opens out through the top of the bracket 75 member 53. The inner end of the piston 56

is vented through a small passage 58 to permit reciprocation of the piston member 56, which piston member serves through its frictional engagement with the bracket bore wall to retard the movement of the receptacle 48. With this construction, when the pen is inserted within the receptacle and released, the receptacle and the contained pen move slowly downward to the position shown in full lines in Fig. 5 which is substantially the same position that the re- 10 ceptacle assumes in the form of Figs. 1 to 3, inclusive. When the pen is removed from the receptacle, the latter will return to its upright or dotted line position of Fig. 5 under the influence of the weight member 59 within the 15 closed end of the receptacle, this movement being retarded by the piston member 56.

In case it is desirable to further retard the lowering movement of the receptacle and contained pen, I may employ an arrangement such 20 as that illustrated in Fig. 6. This form is similar to that shown in Fig. 5, except that the vent passage 60 is normally restricted by a ball member 61. When the pen is inserted in the receptacle, and permitted to move downwardly with 25 the receptacle, the ball 61 traps the air sufficiently ahead of the piston to slow up this movement to an extent depending upon the rate of leakage of air past the ball 61. Obviously, the movement of the receptacle to its raised position, when the pen is removed, is not materially affected by the ball 61.

Still another form of receptacle retarding mechanism is shown in Fig. 7. In this form, the receptacle and pen are the same as that 35 shown in Fig. 5, but the retarding mechanism takes the form of a plurality of interconnected gears, the operating friction of which serves the retarding purpose. More particularly, in this form, I provide a shell-like bracket 62 comprising a pair of similar casing parts securely held together by cross rivets 63. A bar member 64 is molded, or otherwise secured, within the receptacle wall, and this bar member is provided with a depending arm like member which 45 takes the form of a sector gear 65 passing through a slot 66 in the upper part of the casing and pivotally supported therein by a cross shaft 67 having its opposite ends carried by the side walls of the casing 62. The gear sector 65 50 meshes with a small gear 68 associated with a comparatively large gear 69 which, in turn, meshes with another relatively small gear 10 associated with a large gear 71 of approximately the same size as the gear 69. The gear 71 meshes 55with another small gear 72 similar to the gears 68 and 70 associated with another large gear 73 corresponding to the gears 69 and 71. All of these gears are arranged in pairs supported by shafts having their ends journaled in the side walls of the casing 62, and it will be obvious that, as the sector gear 65 is rocked back and forth, the several gears are rotated and the friction set up in the rotation of these gears will serve as a brake upon the movement of the pen-receiving receptacle 74. In other words, when the pen 75 is inserted within the receptacle and released, it will move slowly to its position of Fig. 7. When it is removed from the receptacle, the latter, through the operation of a weight member similar to the weight member of Fig. 1, in the closed end of the receptacle, will move slowly under the action of the gears 68-13 to a raised position such as that shown in Fig. 3. The shell member 62 is so shaped

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that as the receptacle moves toward its horizontal position, it will engage the top of the shell in such a manner (Fig. 7) that it will be held at approximately a 5 degree angle with respect to the base, as in the previous forms. Also, with the shell beneath the closed end of the receptacle sloped downwardly as shown, this portion of the shell will be engaged by the receptacle and limited to the approximately 45 degree angle in its raised position.

It is believed that the objects and advantages of my invention as above stated will be obvious from the foregoing description. It is also to be understood that, while I have shown several forms of my invention, other changes in details and arrangement of parts may be resorted to without departing from the spirit and scope of my invention as defined by the claims that follow

iollow.

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

1. In a desk set, a base, a pen-receiving receptacle adapted to receive the writing point end of a fountain pen, and means for mounting said receptacle on said base comprising a member releasably connected to said base, a member connected to said receptacle intermediate its ends, and a hinge connection between said two members having provision for limiting movement of 30 said receptacle to and from a position wherein it is tilted very slightly above the horizontal so that ink from the pen contained within said receptacle will flow with a minimum of pressure toward the writing point end of said pen, to a 35 position less than the vertical wherein the pen may be readily inserted therein and removed therefrom.

2. In a desk set, a base, a pen-receiving receptacle adapted to receive the writing point end of a fountain pen, and means for mounting said receptacle on said base comprising a member releasably connected to said base, a member connected to said receptacle intermediate its ends, and a hinge connection between said two members having provision for limiting movement of said receptacle to and from a position wherein it is disposed at an angle of approximately 5 degrees with respect to the horizontal to a position wherein it is disposed at approximately 45 degrees with respect to the horizontal.

3. In a desk set, a base, a pen-receiving receptacle adapted to receive the writing point end of a fountain pen, and means for mounting said receptacle on said base comprising a member re-55 leasably connected to said base, a member connected to said receptacle intermediate its ends, a hinge connection between said two members. and spaced stop elements associated with one of said members and adapted to be engaged by 60 the other of said members for limiting hinging movement of said receptacle to and from a lowered position slightly tilted with respect to said base and wherein ink in the pen flows toward the writing point end thereof, to an upright position 65 somewhat less than the vertical where the pen may be readily inserted in and removed there-

from, and vice versa.

4. In a desk set, a base, a pen-receiving receptacle adapted to receive the writing point end of a fountain pen, and means for mounting said receptacle on said base comprising a member connected to said base, a member connected to said receptacle intermediate its ends, a hinge connection between said two members, and spaced stop elements, said base-connected mem-

ber adapted to be engaged by the other of said members, one of said stop elements being slightly inclined from the vertical and the other of said stop elements being disposed at a greater angle to the vertical for respectively limiting hinging movement of said receptacle from a lowered position only slightly tilted with respect to said base and wherein ink in the pen flows toward the writing point end thereof, to an upright position somewhat less than the vertical where the pen 10 may be readily inserted in and removed therefrom, and vice versa.

5. In a desk set, a base, a pen-receiving receptacle adapted to receive the writing point end of a fountain pen, and means for mounting said 15 receptacle on said base comprising a member connected to said base, a member connected to said receptacle intermediate its ends, one of said members having a recess in its end adapted to receive an end portion of the other of said mem- 20 bers, means pivotally connecting said two members together within said recess, said recess having one end wall inclined slightly from the vertical and adapted to be engaged by the said other member to limit said receptacle to a lowered posi- 25 tion slightly inclined from the horizontal with the writing point end of the pen contained therein extending downwardly, the other end wall of said recess being disposed at a greater angle from the vertical to limit said receptacle to an 30 upright position wherein the pen may be readily inserted therein and removed therefrom.

6. In a desk set, a base, a pen-receiving receptacle having one end open and its other end closed and adapted to receive the writing point end of 35 a fountain pen, means for mounting said receptacle on said base comprising a hinge connection between the intermediate portion of said receptacle and said base, said connection having provision for limiting the lowered position of said 40 receptacle to one in which the receptacle is slightly inclined from the horizontal with the writing end of the pen projecting downwardly, and for limiting the raised position of said receptacle to one somewhat less than the vertical 45 but substantially removed from said lowered position, and a weight element in the closed end of said receptacle of sufficient weight to normally swing the latter about said hinge connection to its raised position when the pen is removed 50 therefrom, said element being of such weight that the pen overbalances the same and moves the receptacle to its lowered position when the pen is inserted therein.

7. In a desk set, a base, a pen-receiving recep- 55 tacle having a closed end and an open end adapted to receive the writing point end of a fountain pen, and means for mounting said receptacle on said base comprising a member connected to said base, a member connected to said receptacle intermediate its ends, a hinge connection between said two members having provision for limiting movement of said receptacle from a position wherein it is tilted very slightly above the horizontal so that ink from the pen contained within said receptacle will flow with a minimum of pressure toward the writing point end of said pen, to a position less than the vertical wherein the pen may be readily inserted therein and removed therefrom, and a weight element forming 70 a part of and concealed within the closed end of the receptacle and adapted to swing the closed end of the receptacle downward when the pen is removed therefrom, the weight of said element being overcome by the pen when it is inserted 75

in said receptacle to move the open end of said receptacle downward to its position slightly above the horizontal.

8. In a desk set, a base, a pen-receiving re-5 ceptacle having a closed end and an open end adapted to receive the writing point end of a fountain pen, and means for mounting said receptacle on said base comprising a member connected to said base, a member connected to said 10 receptacle intermediate its ends, a hinge connection between said two members having provision for limiting movement of said receptacle from a position wherein it is disposed at an angle of approximately 5 degrees with respect to the 15 horizontal to a position wherein it is disposed at approximately 45 degrees with respect to the horizontal, and means forming a part of and concealed within the closed end of said receptacle for moving it to the said 45 degree position, the 20 action of said means being overcome by the pen when it is inserted within said receptacle to move said receptacle to its said 5 degree position.

9. In a desk set, a pen-receiving receptacle having one end closed and the other open to 25 receive the writing point end of a pen having at its writing point end a continuous annular shoulder, and means for supporting the pen in said receptacle comprising a resilient seat member shiftable axially of the receptacle and nor-30 mally spaced from the closed end of the receptacle and adapted to be engaged under slight pressure by the shoulder of the pen to seal the writing end portion of the pen contained therein apart from the atmosphere, means yieldably urg-35 ing said seat member toward the open end of said receptacle, and grip means in said receptacle outwardly of said seat member for grippingly engaging the pen outward of its shoulder and for releasably holding the pen shoulder engaged with 40 said seat member under pressure.

10. In a desk set, a pen-receiving receptacle having one end open to receive the writing end portion of a fountain pen having a continuous annular shoulder at its writing end portion and 45 also a circumferential enlargement spaced from the pen shoulder away from the writing point end, a continuous annular seat member formed of resilient material within said receptacle and adapted to be engaged by the pen shoulder to seal 50 the writing end portion of the pen apart from the atmosphere, said seat member being movable from a position near the center portion of the receptacle to a point near the open end thereof, means urging said seat member forwardly toward 55 the open end of the receptacle into sealed engagement with the pen shoulder as and when the pen is inserted within the receptacle, and means located near the open end of the receptacle outwardly from the outward portion of said seat 60 member for snap-engaging the pen enlargement when the pen is fully inserted within the receptacle for holding the pen sealed against said seat member.

11. In a desk set, a pen-receiving receptacle 65 having one end open to receive the writing end portion of a fountain pen having a continuous annular shoulder at its writing end portion and also a circumferential bead or the like enlargement spaced from the pen shoulder away from 70 the writing point end, a continuous annular seat member formed of a comparatively soft rubber material and movable within said receptacle from a point therewithin to a point near its outer end and adapted to be engaged by the pen shoulder to 75 seal the writing end portion of the pen apart from the atmosphere, spring means urging said seat member into sealed engagement with the pen shoulder as and when the pen is inserted within the receptacle, and spring means located near the open end of the pen outwardly from said seat member for snap-engaging the pen enlargement when the pen is fully inserted within the receptacle for holding the pen sealed against said seat member, and for limiting the outward movement of said seat member.

12. In a desk set, a pen-receiving receptacle having one end open to receive the writing end portion of a fountain pen having a continuous annular shoulder at its writing end portion and also a circumferential enlargement spaced from the 15 pen shoulder away from the writing point end, a cup member slidably mounted within said receptacle and adapted to receive and enclose the writing end portion of the pen, a continuous annular seat formed of a resilient material carried 20 by the open end of said cup member and adapted to be engaged by the pen shoulder, spring means constantly urging said cup member toward the open end of said receptacle, a plurality of annularly arranged spring fingers mounted near the 25 open end of said receptacle, said spring fingers and the barrel enlargement being so relatively positioned that when said cup member is slid inwardly to its innermost position against said spring means said spring fingers snap-engage the 30 pen behind the enlargement and hold the pen in that position against accidental displacement, wherein the writing end portion of the pen is sealed apart from the atmosphere, and means adjacent the outer end of the receptacle for limit- 35 ing outward movement of said cup member.

13. In a desk set, a base, a pen-receiving receptacle having one end closed and its other end open adapted to receive the writing point end of a fountain pen, means for mounting said recep- 40 tacle on said base comprising a member connected to said base, a member connected to said receptacle intermediate its ends, a hinge connection between said two members, a weight element associated with the closed end of said receptacle and adapted to move the receptacle to an upright position when the pen is removed therefrom, the counterweighting action of said element being overcome when the pen is inserted in the open end of the receptacle and released so 50 that the pen and receptacle then move to a lowered position, and braking means between said receptacle and said base for retarding said lowering movement of the receptacle and pen as well as the rising movement of the receptacle 5; when the pen is removed.

14. In a desk set, a base, a pen-receiving receptacle having one end closed and its other end open adapted to receive the writing point end of a fountain pen, means for mounting said re- 60 ceptacle on said base comprising a member connected to said base, a member connected to said receptacle intermediate its ends, a hinge connection between said two members, a weight element associated with the closed end of said re- 6: ceptacle and adapted to move the receptacle to an upright position when the pen is removed therefrom, the counterweighting action of said element being overcome when the pen is inserted in the open end of the receptacle and released so 70 that the pen and receptacle then moved to a lowered position, means for retarding the hinging movement of said receptacle in both directions, which means comprises a braking member carried by the base-mounted member, and 71

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means for connecting said braking member to the receptacle for applying a braking action to the latter in the hinging movement thereof.

15. In a desk set, a base, a pen-receiving receptacle having one end closed and its other end open adapted to receive the writing point end of a fountain pen, means for mounting said receptacle on said base comprising a member connected to said base, a member connected to said 10 receptacle intermediate its ends, a hinge connection between said two members, a weight element associated with the closed end of said receptacle and adapted to move the receptacle to an upright position when the pen is removed 15 therefrom, the counterweighting action of said element being overcome when the pen is inserted in the open end of the receptacle and released so that the pen and receptacle then move to a lowered position, means for retarding the hing-20 ing movement of said receptacle in both directions which comprises a piston element operable · in a cylinder formed in and opening out through the top of said base-mounted member, means connecting said piston member to said receptacle, 25 and means for venting the inner end of said cylinder to atmosphere for facilitating movement of said piston member therein.

16. In a desk set, a base, a pen-receiving receptacle having one end closed and its other 30 end open adapted to receive the writing point end of a fountain pen, means for mounting said receptacle on said base comprising a member connected to said base, a member connected to said receptacle intermediate its ends, a hinge 35 connection between said two members, a weight element associated with the closed end of said receptacle and adapted to move the receptacle to an upright position when the pen is removed therefrom, the counterweighting action of said 40 element being overcome when the pen is inserted in the open end of the receptacle and released so that the pen and receptacle then move to a lowered position, means for retarding the hinging movement of said receptacle in both direc-45 tions which comprises a piston member mounted within a cylinder formed in and opening outwardly through the top of said base-mounted member, means connecting said piston member to said receptacle, and means including a pas-50 sageway connecting the inner end of said cylinder to atmosphere and a ball member associated with said passageway restricting the same for regulating the movement of said piston member in said cylinder.

17. In a desk set, a base, a pen-receiving receptacle having one end closed and its other end open adapted to receive the writing point end of a fountain pen, means for mounting said receptacle on said base comprising a member 60 connected to said base, a member connected to said receptacle intermediate its ends, a hinge connection between said two members, a weight element associated with the closed end of said receptacle and adapted to move the receptacle to an upright position when the pen is removed therefrom, the counterweighting action of said element being overcome when the pen is inserted in the open end of the receptacle and released so that the pen and receptacle then move to a lowered position, means for retarding the hinging movement of said receptacle in both directions which comprises a gear element carried by said receptacle-mounted member, and a plurality 75 of differentially-sized and intermeshing gears carried by said base-mounted member, said receptacle-carried gear element being engaged with at least one of said base-carried gears, the arrangement being such that the hinging movement of said receptacle sets all said gears in motion 5 so that the operating friction thereof affords a braking action.

18. In a desk set, a base, a pen-receiving receptacle having one end open and its other end closed and adapted to receive the writing point 10 end of a fountain pen, means for mounting said receptacle on said base comprising a hinge connection having a part connected to said base and a part connected to said receptacle intermediate the ends of the latter, means for limiting the low- 15 ered position of said receptacle to one in which the receptacle is only slightly inclined above the horizontal and for limiting the raised position of said receptacle to one somewhat less than the vertical but substantially removed from said low- 20 ered position, that portion of said receptacle from said hinge connection to the closed end thereof being so constructed and arranged that it is of greater weight than the other portion of said receptacle from said hinge connection to its 25 open end so that said receptacle is moved to its raised position when the pen is removed therefrom, the difference in weight of said receptacle portions being such that the pen overcomes the weight of the heavier portion and moves the re- 30 ceptacle to its said lowered position when the pen is inserted therein.

19. In a desk set, a base, a pen-receiving receptacle, open at one end and closed at the other end, a hinge connection carried by said base and 35 connected to said receptacle between its open and closed ends, that portion of said receptacle on the side of said hinge connection adjacent the closed end being of greater weight than that portion of the receptacle on the other side of 40 the hinge connection so that said receptacle normally tends to assume a position about said hinge connection wherein its open end points upwardly at a substantial angle from the horizontal, and the weight of the closed end portion of said receptacle being such that it is overcome by the weight of a pen inserted in the open end of the receptacle so that the open end of said receptacle swings downwardly toward the base when a pen is inserted therein, and means by which the low- 50ering movement of the open end of said receptacle is limited to prevent the receptacle from moving downwardly beyond a predetermined position with respect to the base when the pen is inserted therein.

20. In a desk set, a base, a pen-receiving receptacle having a closed end and an open end adapted to receive the writing point end of a fountain pen, a weight element mounted within the receptacle at the closed end thereof and forming 60 a part of the inner wall of the receptacle, whereby the closed end of said receptacle is of greater weight than its open end, and means for mounting said receptacle upon said base including a hinge connection having a part connected to 65 said receptacle between its ends and outwardly beyond said weight element.

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21. In a desk set, a base, a pen-receiving receptacle having a closed end and an open end adapted to receive the writing point end of a 70 fountain pen, a weight member within said receptacle at the closed end thereof having a recess therein, a cup member mounted within said receptacle and arranged to be slidably received in said recess, spring means in said recess urging 75 said cup member outwardly toward the open end of said receptacle, a resilient seat member carried by the outer end of said cup member and adapted to be engaged by a pen insert within said receptacle, and means for grippingly engaging a pen inserted within said receptacle and for holding the same inwardly of the receptacle with its forward end engaged by said seat member and with said cup member pressed slidably inward.

22. A closure for a pen comprising a receptacle having one end closed and the other open to receive the writing point end of a pen having adjacent its writing point end a continuous annular 15 shoulder, and means in said receptacle for engaging said shoulder, said means comprising a seat member shiftable axially of the receptacle and normally spaced from the closed end of the receptacle and adapted to be engaged under 20 slight pressure by the shoulder of the pen, said member being adapted to seal the writing end portion of the pen from the atmosphere when inserted in the receptacle, means yieldably urging said member toward the open end of said re-25 ceptacle and grip means inserted in said receptacle and disposed towards the open end of said receptacle from said seat member for grippingly engaging a pen and for releasably holding the pen shoulder engaged with said seat member un-30 der pressure.

23. A closure for a pen comprising a receptacle having one end closed and the other open to receive the writing point end of a pen having adjacent its writing point end a continuous annular 35 shoulder, and means in said receptacle for engaging said shoulder, said means comprising a seat member shiftable axially of the receptacle and having a limited movement toward the open end of the receptacle whereby to be normally 40 spaced from the closed end of the receptacle and adapted to be engaged under slight pressure by the shoulder of the pen, said member being adapted to seal the writing end portion of the pen from the atmosphere when inserted in the 45 receptacle, means yieldably urging said member toward the open end of said receptacle and grip means inserted in said receptacle and disposed towards the open end of said receptacle from said seat member beyond the limit of movement of 50 said member for grippingly engaging a pen and for releasably holding the pen shoulder engaged with said seat member under pressure.

24. A closure for a pen comprising a receptacle having one end closed and the other open 55 to receive the writing point end of a pen having adjacent its writing point end a continuous annular shoulder, and means in said receptacle for engaging said shoulder, said means comprising a resilient seat member shiftable axially of 60 the receptacle and having a limited movement toward the open end of the receptacle whereby to be normally spaced from the closed end of the receptacle and adapted to be engaged under slight pressure by the shoulder of the pen, said 65 member being adapted to seal the writing end portion of the pen from the atmosphere when inserted in the receptacle, means yieldably urging said member toward the open end of said receptacle and grip means inserted in said receptacle 70 and disposed towards the open end of said re-

ceptacle from said seat member beyond the limit of movement of said member for grippingly engaging a pen and for releasably holding the pen shoulder engaged with said seat member under pressure, and a stop in said receptacle for limiting movement of said member short of said grip means.

25. A closure for a pen comprising a receptacle having one end closed and the other open to receive the writing point end of a pen having adja- 10 cent its writing point end a continuous annular shoulder, and means in said receptacle for engaging said shoulder, said means comprising a resilient seat member shiftable axially of the receptacle and having a limited movement toward the 15 open end of the receptacle whereby to be normally spaced from the closed end of the receptacle and adapted to be engaged under slight pressure by the shoulder of the pen, said member being adapted to seal the writing end portion of 20the pen from the atmosphere when inserted in the receptacle, means yieldably urging said member toward the open end of said receptacle and grip means inserted in said receptacle and disposed towards the open end of said receptacle 25 from said seat member beyond the limit of movement of said member for grippingly engaging a pen and for releasably holding the pen shoulder engaged with said seat member under pressure, and a stop in said receptacle intermediate the  $^{30}$ member and said grip means for limiting movement of said member short of said grip means.

26. In a desk set, a base, a pen-receiving receptacle open at one end and closed at the other end, a hinge connection carried by said base and 35 connected to said receptacle between its open and closed ends, that portion of said receptacle on the side of said hinge connection adjacent the closed end being of greater weight than that portion of the receptacle on the other side of the 40 hinge connection so that said receptacle normally tends to assume a position about said hinge connection wherein its open end points upwardly at an angle from the horizontal, and the weight of the closed end portion of said receptacle being 45 such that it is overcome by the weight of a pen inserted in the open end of the receptacle so that the open end of said receptacle swings downwardly toward the base when a pen is inserted therein, the construction and relation of the parts 50 being such that the lowering movement of the open end of the receptacle is limited to a predetermined extent with respect to the base.

27. In a desk set, a base, a pen-receiving receptacle adapted to receive the writing point end of a fountain pen, and means for mounting said receptacle on said base comprising a member detachably connected to said base, a member connected to said receptacle intermediate its ends, a hinge connection between said two members, and spaced stop elements associated with one of said members and adapted to be engaged by the other of said members for limiting hinging movement of said receptacle to and from a lowered position adjacent to said base to an upfight position somewhat less than the vertical where the pen may be readily inserted in and removed therefrom, and vice versa.