Aug. 19, 1958 D. PARKER 2,847,977

PEN DESK SET BASE

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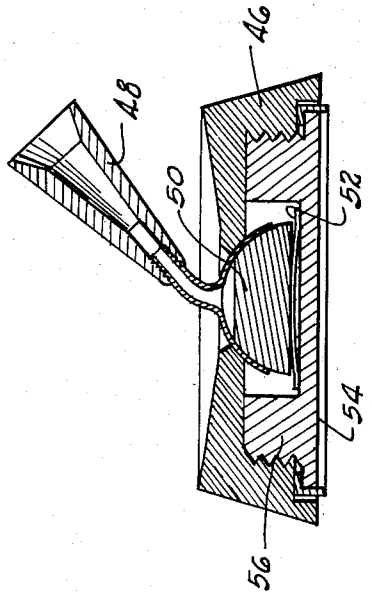


Fig 2

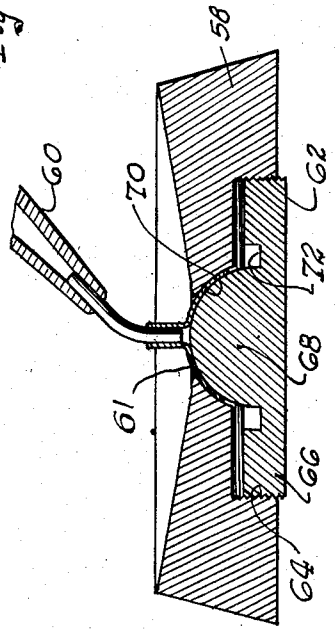


Fig 3

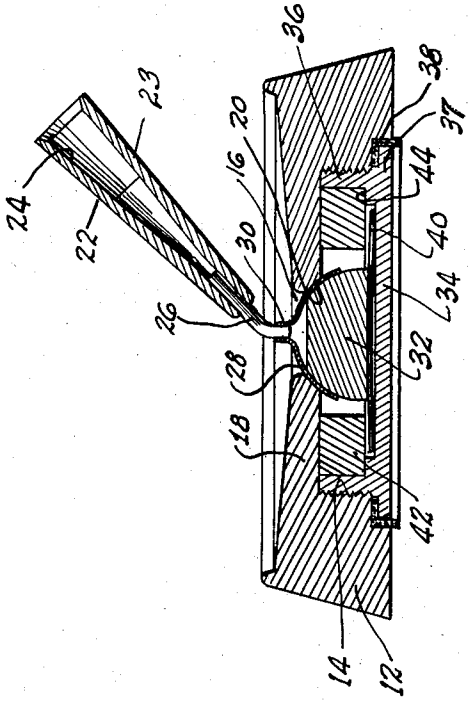


Fig 1

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The present invention relates to a pen desk set, and more particularly to a pen-supporting base for such a set.

An object of the invention is to provide an improved pen-supporting base having a pen-receiving bowl movable to different angles with respect to the body of the base, which device is of simple and inexpensive construction.

Another object is to provide a base of the general character noted having a bowl that can be swivelled universally, having construction including a shell-shaped element on the bowl and elements in the stationary part of the base friction-gripping the shell-shaped element, which device is of simple construction.

Still another object is to provide a device of the foregoing character in which, in at least certain of its forms, the bowl is held in adjusted position by friction gripping means yieldingly urged into gripping position.

Other objects and advantages of the invention will appear from the following detail description taken in conjunction with the accompanying drawings in which:

Figure 1 is a vertical sectional view of one form of device embodying the principles of the present invention;

Fig. 2 is a similar view of a second embodiment of the invention; and

Fig. 3 is a similar view of a third form of the invention.

Referring in detail to the drawings and particularly to Fig. 1, the device here shown includes a body 12, preferably circular in plan view of suitable size and proportions desired for the intended function and appearance. The body 12 is formed of a suitable material such as molded plastic and, as such, it becomes a particularly inexpensive item in the article. The body has a cavity 14 in its undersurface of substantial dimensions, defined at the top by a top wall 18 which has a central aperture 16. The peripheral portion of the body defining the aperture has an annular and spherical bearing surface 20 facing in a generally downward direction. A pen holding or receiving means 22 is mounted on the body for universal swivelling movement thereon and includes a bowl or socket member 23 defining a socket 24 open at one end into which a pen such as a desk pen or a fountain pen may be inserted. Preferably the socket is tapered for receiving the usually tapered forward end of the pen and the other and lower end of the socket member is fitted with a stem 26 by which it is mounted, the stem 26 having a cup-shaped, shell-like mounting element 28 fitted thereon. The mounting element 28 is spherical, of no greater extent than a hemisphere, and preferably slightly less, and is secured to the stem as by means of a tubular portion 30 press fitted on the stem and preferably disposed centrally of the spherical surface. The bowl or socket member projects through the aperture 16, and the mounting element 28 brought into bearing engagement with the bearing surface 20 and retained in such position by a dome member 32, which is in the form of a truncated sphere with an effective spherical surface of at least as great extent as the spherical surface of the mounting element 28, that is, a substantial

portion of the mounting element 28 has bearing engagement with the dome member. The stem 26 preferably has an upper portion inclined to the portion which is fitted into the mounting element whereby to dispose the bowl, and the pen therein, at a convenient angle to the vertical. This form of stem also enables adjustment of the bowl for disposing the pen in or close to a horizontal position.

The dome member 32 is retained in position by a closure element or plate 34 screw-threaded at 36 in the cavity. The closure plate has an outer peripheral portion 37 for gripping a sealing gasket 38 between itself and the corresponding face portion of the body.

For the purpose of facilitating yielding retention of the mounting element 28 and hence the bowl 22 in place, a leaf spring 40 in the form of an elongated strip, is interposed between the closure plate and the dome member 32. This spring yieldingly biases the dome member upwardly and the mounting element 28 is friction-gripped between the dome member and the bearing surface 20. The friction established is such that the user may easily move the bowl to any desired position, but it is normally retained in that position after adjustment thereto. The closure plate 34 is so dimensioned that when it is screwed up tight, as is preferably the case, the leaf spring 40 will impose the desired yielding pressure on the dome member for maintaining the bowl in any desired position to which it is adjusted.

Since the body 12 is formed of such material as molded plastic, in keeping with the inexpensive character of the device, it is of relatively light weight, and, in order to provide added weight to prevent the base from being unduly and accidentally shifted on the desk, additional weight is provided by means of an annular piece or washer 42 disposed in the cavity 14 and within the flange 36. This annulus or washer rests on a face 44 provided by an annular ledge and is raised above the level of the inner central face of the closure plate 34 for preventing interference of the washer 42 with the leaf spring 40. The cavity 14 and flange 36 are of substantial dimensions and the dome member 32 is relatively small, whereby the washer 42 may be of substantial mass for providing the desired added weight.

The depth of the cavity results in a relatively thin top wall 18 and as a consequence the bowl 22 extends a maximum distance above the top surface of the body, and particularly the top portion of the mounting element 28 extends upwardly through the aperture a maximum distance, thereby enabling maximum swiveling movement of the bowl.

The closure element 34 may be provided with sockets for receiving the pins of a spanner wrench for facilitating its insertion in and removal from the cavity.

The structure of the Fig. 2 embodiment is generally similar to that of Fig. 1, but it is provided with a weighting means integral with the closure element in the cavity. In this embodiment the body 46, bowl 48, and dome member 50 are generally similar to the corresponding elements of Fig. 1. However, the closure means 54 includes the closure plate portion and the screw threaded portion or flange 56 which, instead of being thin as is the flange 36, of the structure shown in Fig. 1, is of substantial radial extent and provides the added weight which in the first embodiment, is provided by the separate weighting member 42. The leaf spring 52 in the structure of Fig. 2, which biases the dome member 50 upwardly, is necessarily shorter than the spring of the first embodiment but it may be of appropriate dimensions in other directions to provide the necessary biasing force.

Fig. 3, showing the third embodiment of the invention, includes a bottom closure member and dome member

that are integral. In this embodiment the body 58, bowl 60 and mounting element 61 are similar to the corresponding elements of the previous embodiments. The cavity 64 is closed by a closure member 62 which has a generally plate-like portion and a central spherical portion 68 forming a dome extending upwardly from the plate portion. This dome portion grips the mounting element 61 between itself and the bearing surface 70. Surrounding the dome is a groove 72 adapted to receive the mounting element to enable maximum swiveling movement of the bowl while providing maximum depth of the closure element in positions outwardly of the groove. In the present instance the bottom closure means is of unusually inexpensive construction, being an integral piece, and the desired friction-gripping effect between the dome portion and the bearing surface 70 may be maintained by turning the closure member in to the proper extent.

I claim:

1. A base for a pen desk set comprising: a base body having a cavity in its under surface, having an aperture opening from the cavity upwardly through the top of the base body, and having a generally downwardly facing annular bearing surface surrounding the aperture and curved in at least one direction and extending no greater than 180 degrees in said direction; a socket member having an upper socket portion and having a lower mounting portion forming a shell shape mounting member curved complementally to said bearing surface and of no greater extent than 180 degrees and positioned with its outer convex side engaging said bearing surface, said upper socket portion projecting from said mounting member out of and above the aperture; a closure plate adjustably secured in said cavity; a dome element in said cavity separate from said closure plate and having a surface curved complementally to said mounting member and said bearing surface and engaging the concave side of said mounting member for friction-gripping the mounting member between said dome element and said bearing surface; a leaf spring interposed between said closure plate and said dome element yieldingly biasing said dome element upwardly; said closure plate having an annular weighting means projecting upwardly therefrom in the cavity in surrounding relation to said dome element; said dome element, said mounting member and said bearing surface all being of very small diameter relative to the base body; the diameters of said cavity and of said closure plate being relatively large and being at least half the diameter of said base body; the under surface of said closure plate together with the under surface of said base body forming the supporting surface of the base.

2. The invention set forth in claim 1 wherein the weighting means is a separate part carried by the closure plate and is confined to between the closure plate and an upper wall forming the inner top of the base body and is of greater density than the material of the base body.

3. The invention set forth in claim 1 wherein the weighting means is an integral extension of the closure plate, the closure plate being of greater density than the material of the base body.

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