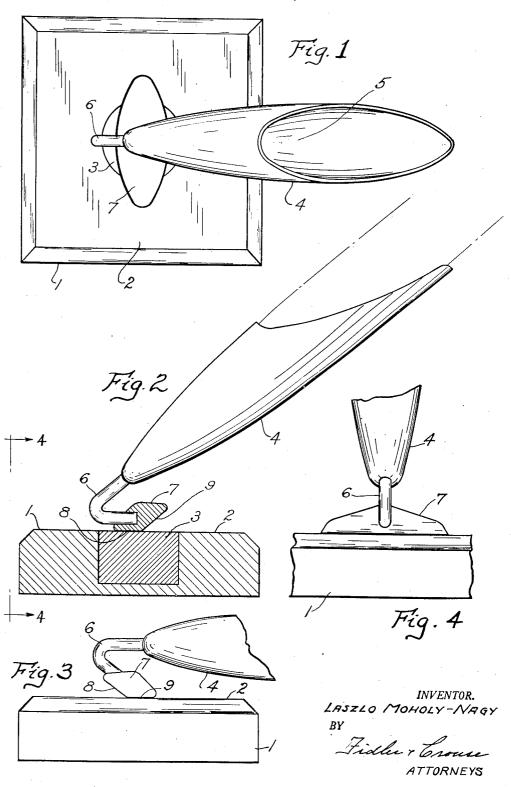
PEN DESK SET

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PEN DESK SET

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This invention relates to pen desk sets of the type wherein the pen receptacle is detachably secured to the base of the set by magnetic attraction; and my primary object is to provide a desk set of that character wherein the pen receptacle 5 can be adjusted to assume a variety of angular positions relatively to a horizontal plane and can also be rotated and moved about in a horizontal plane, so that the user is able to adjust it positionally as best suits his convenience.

Another object is to provide a magnetic pen desk set of very simple construction which is capable of being manufactured at low cost, but which nevertheless is sturdy and durable in construction and not likely to get out of order.

A further object is to provide a magnetic desk set construction which, while being inexpensive to manufacture, is well adapted to being embodied in a large variety of attractive designs.

pen desk set construction wherein the permanent magnet or magnets which holds the pen receptacle to the base may be flush with the top surface of the base—thus lending itself to adaptaflush with a desk top surface or wherein a desk top itself constitutes the base of a set.

A preferred embodiment of my invention is depicted in the drawing which accompanies this specification, wherein:

Figure 1 is a plan view of a pen desk set;

Fig. 2 is a view of the same desk set, partly in side elevation and partly in vertical section, showing the pen receptacle in its elevated position;

Fig. 3 is a side elevational view showing the pen 35 receptacle in its depressed or horizontal position:

Fig. 4 is a fragmentary front elevational view taken along line 4-4 of Fig. 2.

tangular form having a flat top surface 2 into which is sunk a permanent bar magnet 3, the top surface of which is flush with the top surface 2 of the base. Magnet 3 may conveniently be cylindrical in form, as shown, and is so oriented that 45 its top surface constitutes one of its two magnetic poles-the lower surface of the magnet constituting the other pole. Preferably, the magnet is firmly secured in the base as by being pressed in, and it may advantageously be made of one of the 50highly magnetizable alloys such as "Alnico."

Mounted on the base, but separable therefrom. is a pen receptacle 4 having a cavity 5 for the reception of a pen. Rigidly attached to and protruding from the closed forward end of receptacle 55 to the number of possible vertical adjustments

4 is a bent rod 6 to which is firmly secured a shoe 7 of paramagnetic material by means of which the pen receptacle is supported on the base and secured thereto magnetically.

As depicted in Fig. 1, shoe 7 may have an elliptical contour; and as shown in Fig. 2 it may be of approximately diamond-shaped cross section. However, the elliptical contour and diamondshaped cross section are purely ornamental considerations and not of the essence of my invention. The material factor in the formation of shoe 7 is that it has a plurality of flat surfaces which are adapted, one at a time, to engage, in face-to-face contact, the magnetized top surface 15 area of the base, which in this case is the top surface of magnet 3.

Specifically, shoe 7 is provided, in the present instance, with two flat surfaces 8 and 9 respectively—which surfaces are disposed in two inter-Still another object is to provide a magnetic 20 secting planes and are so oriented mutually and with respect to the pen receptacle that the latter can selectively be positioned and held at two different vertical angles. When the shoe is resting on its surface 8, the pen receptacle assumes the tions wherein either the base of the set is sunk 25 upright position at which it is shown standing in Fig. 2; and it is held in that position by virtue of the magnetic adhesion between the shoe and the magnet. Any other upright position may be provided by suitable modification of the shape of 30 the structure. When the shoe is resting on its surface 9, the pen receptacle assumes a horizontal posture as depicted in Fig. 3, but this also is a matter of choice since it will be obvious that upon suitable modification the pen receptacle could be made to stand at any angle when surface 9 is in face-to-face contact with the magnetized area. The angle through which the longitudinal axis of the pen moves when tilted from one to the other of the two positions in which the pen receptacle The desk set shown includes a base i of rec- 40 will be held is, manifestly, equal to the supplement of the included angle between surfaces 8 and 9. If it is purposed to so design the desk set that the pen receptacle will stand horizontally and, alternately, in an upright position at an angle of 40°, the included angle between surfaces 8 and 9 must be 140° for example. If, on the other hand, it is desired to so design the set that the pen receptacle will stand at angles of say 10° and 45° from the surface 2, the included angle must be 145°. If it is desired to arrange for more than two vertical adjustments, it is, of course, necessary to provide a corresponding additional number of flat surfaces similar to and complementing surfaces 8 and 9. Theoretically there is no limit

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obtainable in this way, but as a practical matter only a few such adjustments are feasible because the shoe would have to be made objectionably large in order to afford enough contact area if an excessive number of contacting surfaces were provided.

The area and width of each surface area 8 and 9, as viewed in Fig. 2, must be sufficient so that the adhesion due to magnetic attraction will be enough to overcome the turning moment due to the weight and overhang of the pen receptacle and the pen therein. The minimum permissible area and width depend upon the strength of the magnet as well as the weight and length of the receptacle and pen, all of which will be apparent; but, in general, the proportions indicated in the drawing will be found to be satisfactory when the strength of the magnet is such as may be expected when it is composed of one of the highly magnetizable alloys such as that 20 heretofore mentioned.

If desired, the base of the set may consist of a whole desk top, having the permanent magnet sunk therein flush with the top surface; and it is feasible in such event to provide two or more separate magnetized areas so that the pen receptacle can be placed in any of a variety of positions thereon.

I claim:

1. In a pen desk set, a base having a flat top 30 surface, a permanent magnet embedded in said base with at least one magnetic pole face flush with said top surface and forming a magnetized top surface area, an elongated sheath-like pen receptacle open at one end for reception of a 3 pen, and a shoe of paramagnetic material attached to the other end of said receptacle and slidably supported on and magnetically retained on said magnetized surface, said shoe having at least two flat surfaces each of substantial area 4 and lying in planes extending at an obtuse angle to each other, one of said surfaces lying in a plane substantially parallel to the longitudinal axis of said receptacle, said surfaces being exposed and adapted selectively to make face-toface contact with said magnetized area, said shoe

being effective, when resting on said magnetized area, to support said receptacle either in a position with its longitudinal axis substantially parallel with the plane of said area or making a substantial, acute angle therewith in accordance with which one of its flat surfaces is in face-to-face contact with said area.

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2. In a pen desk set, a base having a flat top surface, a permanent magnet in said base having a pole face flush with said flat surface, and a receptacle member adapted to be magnetically supported on said base for sliding adjustment about a vertical axis and angular rocking adjustment about a horizontal axis, said receptacle member including an elongated receptacle element closed at one end and open at the other for receiving the end of a pen, and a shoe element of paramagnetic material having at least two flat faces lying in planes extending at obtuse angles to each other and adapted to selectively rest on said flat surface, and an elongated connecting element of generally U-shaped form connected at one end to the closed end of said receptacle and at the other end to a portion of said shoe element remote from said flat faces. with its intermediate portion projecting beyond said shoe.

LASZLO MOHOLY-NAGY.

Date

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