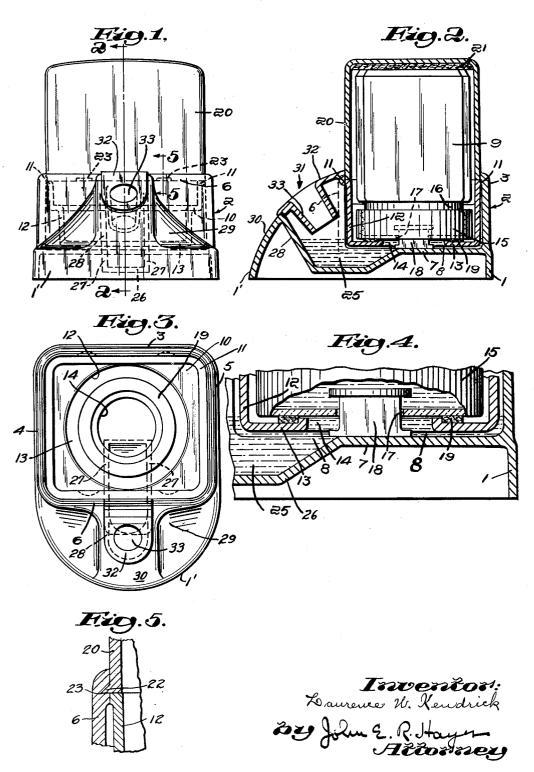
INKSTAND

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INKSTAND

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4 Claims. (Cl. 120-59)

The invention relates to an improvement in inkstands and especially those of the combination type in which a container, or bottle, containing ink is combined with the inkstand.

Among the objects of the invention is to provide a construction which will prevent leakage in case the inkstand is overturned; also a construction that will materially lessen evaporation of the ink.

The construction of the inkstand is also such 10 as to embody various new constituent features, all of which can best be seen and understood by reference to the drawings, in which-

Fig. 1 is a front elevation of the inkstand.

Fig. 2 is a section on the line 2—2 of Fig. 1. Fig. 3 is a top plan of the inkstand with the ink container, or bottle, and its cover removed.

Fig. 4 is a cross section of a detail of construction to which special reference will later be made; and

Fig. 5 is a section on the line 5—5 of Fig. 1. Referring to the drawings: I represents the base of the stand, preferably a hollow base. The base is preferably made generally rectangular at the back, and brought forward to present a 25 rounding front 1'.

Supported from the base is an enclosure 2, generally rectangular in form, with side walls 3, 4, 5 and 6, and a bottom 7. Formed within and by this enclosure is a reservoir 8 filled from an a container, or bottle 9, containing ink, which occupies an inverted position within the inkstand, and is supported as will later be explained.

Located within the enclosure 2 is a partition or diaphragm 10 having upstanding flanges 11 which make closed connection all around with the inside surfaces of the side walls 3, 4, 5 and 6 of the enclosure. The partition has a depressed portion 12 (see Fig. 2) having a bottom 13 within which is an opening 14. The bottom of the 40 depressed portion of the partition and the opening within it occupy a vertically spaced relation to the bottom 7 of the enclosure forming the reservoir.

The ink container or bottle is preferably one 45 provided with the cap 15 having threaded connection with the neck 16 of the container, and this cap, when the container is occupying an inverted position in the inkstand, is located within the depressed portion 12 of the partition. 50 The cap has an opening 17 in it. This opening is controlled by a valve 18 which prevents the escape of ink through the opening in the cap when the container is being held in an in-

During this operation the valve on the cap will pass through the opening in the bottom 13 of the depressed portion of the partition and engage the bottom 7 of the enclosure, and thereupon the valve will be opened and ink will issue from the container to fill the reservoir.

When the cap 15 to the container 9 is located within the depressed portion of the partition a portion of the surface of the cap around the opening 17 in it will occupy a circumscribing relation to the opening 14 in the bottom 13. A compressible seal forming annular washer 19 is interposed between said cap, and the bottom 13 of the partition around the opening 14 therein. The washer is preferably cemented to the bottom 13 of the depressed portion of the partition. A seal will accordingly be formed between the opening 17 in the cap and the partition around the opening 14 in it, upon the application of pressure to the container for compressing the washer, and ink issuing from the container will then pass only into the reservoir. Pressure is applied to the container for compressing the washer, and forming the seal, in the following manner.

Mounted upon the enclosure 2 is a cover 20 which is detachably secured to the enclosure, the enclosure and the cap co-operating to form a housing for the ink container, or bottle.

Interposed in a space left between the top end of the inverted container, or bottle, and the adjacent top end of the cap is a pad 21 of some flexible elastic material which will become compressed when the cover is attached to the enclosure. The pressure of the compressed pad against the container acts through it to compress the washer 19 and form the seal between the end of the container and the partition around the respective openings therein.

The cover, and, for that matter, the entire stand, apart from the ink container, or bottle, is made of plastic material which in itself has a certain amount of elasticity when in a thin plate, as in the cover, and accordingly may be deformed slightly by pressure, and returned to its normal shape when the pressure is removed. The bottom end of the cover fits within the top of the enveloping walls of the enclosure, and preferably in bearing engagement with the top edge to the flanges II of the partition or diaphragm 10. The opposite fore and aft sides of the cover along their bottom edges are provided with clips 22 which, when the cover is distorted by pressure, are brought into position to verted position for placing it within the inkstand. 55 enter sockets 23 formed in the top edges of

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the adjacent walls 3 and 6 of the enclosure so that when the deforming pressure upon the cover is removed these clips will enter the adjacent sockets and the cover will be attached to the enclosure, its detachment being obtained by again deforming, and releasing the clips from their sockets, whereupon the cover may be removed.

The ink reservoir 3 lies between the bottom 7 of the enclosure 2 and the bottom 13 of the par- 10 tition or diaphragm. The bottom 7 of the enclosure is provided with a cutout by which ink in the reservoir may enter and lie contained within an underlying dipwell 25. This dipwell has a bottom 26 and sides 27 which lie in closed 15 connection with the edges of the cutout in the bottom of the enclosure. The bottom and side walls of the dipwell extend forward beyond the fore end wall 6 of the enclosure 2 and connect with a hollow upward extension 28. This extension passes upwardly by the front end wall 6 of the enclosure, making closed connection therewith and lies contained within a molded front 29 of the inkstand which extends from the rounded front I' of its base portion and merges with the front of the enclosure 2. This molded front has an upwardly rounded central portion 30 with an opening 31 in it and the top edges of the upward extension 28 of the dipwell make closed connection all around with the edges of 30 this opening. The opening is closed by a plate 32 bearing a pen receiver or holder 33 which extends downwardly into the upward extension 28 and through which entry is had to the dipwell.

Ink will rise in the ink reservoir and dipwell 35 only to a point substantially level with the opening 14 in the bottom of the partition, for when the reservoir 8 has been filled to a point where the opening 14 in the bottom of the partition has become closed by the ink, then air can no longer enter the container, and ink cannot issue therefrom until the level of the ink in the reservoir has become lowered to permit of the entrance of further air through the opening in the bottom of the partition.

With an inkstand as thus constructed no ink can escape from the inkstand if turned over upon its side or upon its back. Evaporation of ink will be reduced to a minimum for the only opportunity afforded for evaporation is by way of 50 the entrance to the dipwell, and this entrance is usually closed when the inkstand is not in use, by leaving the pen in the receiver or holder 27.

I claim:

1. An ink-dispensing stand comprising a sup- 55 porting base and surmounting wall defining a walled reservoir, said surmounting wall having an opening through the top portion thereof for receiving an ink container and an inclined open socket member extending through the side portion thereof toward the bottom of the reservoir for receiving the point of a writing implement, a vertical partition circumscribing said opening extending downwardly into the reservoir and terminating close to the bottom, a transverse partition subtending the lower end of the circumscribing partition, said subtending partition having a central aperture therein in communication with the underlying portion of the reservoir, and being situated at a lower level than the inner terminal end of the socket member, a container having a neck and cap closing the mouth thereof, the cap having a central opening therein in which is situated a double-acting valve

right and inverted positions of the container. said container being telescopically supported within the opening by engagement of the cap with the subtending partition and with the valve engaged with the bottom of the reservoir so that it is held in a position intermediate its closing position, a yieldable gasket disposed between the cap and subtending partition, means for pressing the container into the opening so that a seal is established between the cap, gasket and the subtending partition around said central aperture, and a depression in the bottom of the reservoir laterally of the aperture in the subtending partition for receiving a body of ink deep enough to submerge the point of the pen placed in said socket, the upper surface of the body of ink being below the inner end of the socket substantially on a level with said sealed opening in the subtending partition.

2. An ink-dispensing stand comprising a supporting base and surmounting wall defining a walled reservoir, said surmounting wall having an opening through the top portion thereof for receiving an ink container and an inclined open socket member extending through the side portion thereof toward the bottom of the reservoir for receiving the point of a writing implement, a vertical partition circumscribing said opening extending downwardly into said reservoir and terminating close to the bottom, a transverse partition subtending the lower end of the circumscribing partition, said subtending partition having a central aperture therein in communication with the underlying portion of the reservoir, an upstanding ledge bordering said aperture, a yieldable gasket of slightly greater thickness than the height of the upstanding ledge surrounding said ledge, a container having a neck and cap closing the mouth thereof, said cap having a central opening therein in which is situated a double-acting valve member which closes the opening in the cap in both upright and inverted positions of the container, said container being telescopically supported within the opening by engagement of the cap with the gasket and engagement of the valve with the bottom of the reservoir so that the latter is held in a position intermediate its closing position, means for pressing the container into the opening so that a seal is established between the cap, gasket and the subtending partition around said central aperture, and a depression in the bottom of the reservoir laterally of the aperture in the subtending partition for receiving a body of ink deep enough to submerge the point of a pen placed in the socket, the upper surface of the body of ink being below the inner end of the socket substantially on a level with said sealed opening in the subtending partition.

3. An ink-dispensing stand comprising a walled 60 reservoir having bottom, side and top walls, a supporting base associated with the bottom wall, said top wall having an opening therein into which may be introduced an ink receptacle, an inwardly extending partition circumscribing said opening, the lower end of which terminates close to the bottom of the reservoir, a transverse partition subtending the circumscribing partition forming a chamber within but separated from the reservoir, said subtending partition having a central aperture therein forming the only communication between the chamber and the reservoir, an ink bottle having a neck, mouth, and closing cap, said cap having a central aperture in which there is mounted a double-acting valve member which closes the opening in both up- 75 which closes the aperture when the bottle is up-

right and also when it is inverted, said bottle being telescopically received by the chamber with its cap resting on the subtending partition and with its valve supported by the bottom wall in an intermediate position, a depression in the bottom wall of the reservoir below the level of the subtending partition and laterally thereof into which ink may flow from the mouth of the bottle, a side wall having an opening therein above the depression surrounded by an inward- 10 ly directed tubular wall forming a socket extending toward the bottom of the receptacle for reception of the point of a pen, the lower end of which terminates above the plane of the subwithin the opening in the top wall to conceal that portion of the bottle extending upwardly from the opening, and means lockably engaging said cover within said opening, said cover when lockably engaging with the top wall being adapted to press the cap of the bottle into sealing engagement with the subtending partition wall around the aperture therein.

4. An ink-dispensing stand comprising a walled reservoir having bottom, side and top walls, a supporting base associated with the bottom wall, said top wall having an opening therein into which may be introduced an ink receptacle, an inwardly extending partition circumscribing the opening, the lower end of which terminates close 30 file of this patent: to the bottom of the reservoir, a transverse partition subtending the circumscribing partition forming a chamber within but separated from the reservoir, said subtending partition having a central aperture therein forming the only communication between the chamber and the reservoir, an ink bottle having a neck, mouth, and closing cap, said cap having a central aperture

in which there is mounted a double-acting valve which closes the aperture when the bottle is upright and also when it is inverted, said bottle being telescopically received by the chamber with its cap resting on the subtending partition and with its valve supported by the bottom wall in an intermediate position, a depression in the bottom wall of the reservoir below the level of the subtending partition and laterally thereof into which ink may flow from the mouth of the bottle, a side wall having an opening therein above the depression surrounded by an inwardly directed tubular wall forming a socket extending toward the bottom of the receptacle tending partition, a cover telescopically engaged 15 for reception of the point of a pen, the lower end of which terminates above the plane of the subtending partition, a cover having resilient walls and a rim, said cover being telescopically engageable within the opening with its rim in abutting engagement with said inwardly extending partition, and means on the rim lockably engageable with the top wall within the opening, said means being engageable and disengageable by pressing the resilient wall of the cover in the 25 immediate vicinity of said locking means.

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