

(No Model.)

C. R. STRAUGHN.
SELF CLOSING INKSTAND.

No. 485,397.

Patented Nov. 1, 1892.

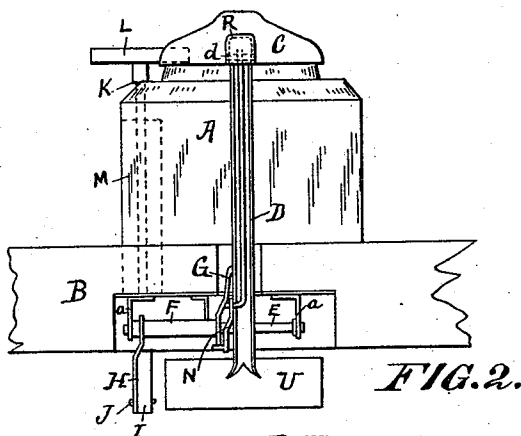
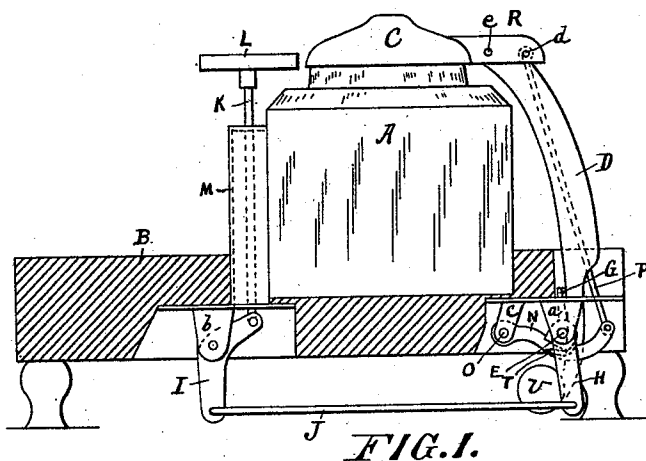


FIG. 4.

FIG. 3.

WITNESSES:

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SELF-CLOSING INKSTAND.

SPECIFICATION forming part of Letters Patent No. 485,397, dated November 1, 1892.

Application filed March 24, 1892. Serial No. 426,199. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. STRAUGHN, a citizen of the United States, and a resident of Fernwood, Delaware county, Pennsylvania, have invented certain new and useful Improvements in Self-Closing Inkstands, of which the following is a specification.

My invention relates to improvements in that class of inkstands furnished with lids which are opened automatically by the pressure of the hand or fingers upon a lever at the instant the pen is to be dipped into the ink and which are self-closing immediately when the pen and the pressure of the hand are withdrawn; and the object of my invention is to furnish a self-closing inkstand which will be simple and inexpensive in construction and positive in its action.

In the accompanying drawings, in which similar letters of reference indicate similar parts throughout the several views, Figure 1 is a side elevation of my inkstand, the base being shown in section; Fig. 2, a rear elevation of the inkstand; Fig. 3, a detached side elevation of the lid and its supporting and operating mechanism; and Fig. 4, a section across the supporting-arm which carries the lid on a line 1 2, Fig. 3.

A is the inkstand; B, the base upon which the inkstand is carried; C, the cover or lid of the inkstand; D, arm, upon the upper end of which cover C is pivoted; E, shaft, upon which arm D is carried; F, collar loose on shaft E; G, an arm extending upward from collar F and engaging the forward end of arm D; H, a crank extending downwardly from collar F; I, a bell-crank lever near the forward end of base B; J, a rod connecting the lower arm of this lever and crank H; K, a rod pivoted to upper arm of bell-crank I and carrying upon its upper end an operating-button L; M, an upright tube or cylinder, through which rod K passes and which guides this rod in its movements.

The shaft E is carried by brackets *a*, secured to the base B, and the bell-crank I is carried by brackets *b*, also secured to base B.

N is an arm the forward end of which is carried by a shaft O, carried by and free to turn in bearings *c*, carried by the base B. The rear end of arm N has pivoted to it one end of a rod P, the other or upper end of

which is pivoted to the rear end of an arm R, which is secured to and projects backward from the cover C. *d* is the pivot which secures this rod to arm R, and *e* is the pivot by means of which arm D is pivoted to arm R. The arm G upon shaft E projects below this arm and forms a cam S, which is adapted to engage a plate T, carried by arm N.

U is a counter-weight secured to the lower end of arm D.

The operation of the device is as follows: The finger being placed upon button L, depresses this button, the rod K, and upper arm of bell-crank I, draws back the lower arm of this bell-crank, rod J, and crank H, which revolves sleeve F and causes arm G to strike the forward end of arm D. At this instant the cam S strikes plate T, and a further movement of arm G and cam S depresses plate T and arm N slightly and causes through rod P the upward lifting of the cover C, this cover being pivoted to arm D at *e*. A further movement of the arm G pushes the arm D, the cover C, and their connected parts back, as shown by dotted lines in Fig. 3, the cover during its movements being held clear of and moving in a line parallel to the top of the ink-well by the action of the rod P and its connected parts. This is a very important feature of my invention, for if the cover rested upon and was dragged along the top of the well its movements might be very much retarded by the friction between it and the well or entirely stopped by coming in contact with dried particles of ink or other substances on top of the well. This would be particularly the case during the closing movements of the cover, which depend solely upon the action of the counter-weight U upon the bottom of the arm D.

The arm D is preferably bent from a piece of sheet metal and has a U shape, as shown in Fig. 4. This shape insures strength as well as lightness, and in addition forms a case through which the rod P passes and in which this rod is concealed.

Having thus described my invention, I claim—

1. The combination, in an automatic inkstand, of the ink-well and cover and an arm rigidly secured to and projecting backward from said cover, a supporting-arm pivoted

to said arm on said cover, as at *e*, and supported upon a shaft carried in suitable bearings by the base of the inkstand, a rod the upper end of which is pivoted to arm on said
5 cover, as at *d*, and the lower end of which is secured to the outer end of a lever, the rear end of which is carried by a shaft pivoted to the base, as shown, and devices, substantially as shown, operated by the hand and adapted
10 to first draw down said rod and lift said cover from the ink-well and then to move said cover and its supporting-arm backward.

2. The combination, in an inkstand, of the ink-well and cover, an arm pivoted to the rear
15 of said cover, a counter-weight on bottom of said arm, a shaft *E*, carried in bearings carried by the base, a collar loose on this shaft, an arm extending upwardly from said collar and adapted to engage the forward end of

arm which carries cover, a cam on said collar, 20
an arm carried by a shaft pivoted in bearings carried by the base and forward of said cam, a plate on said arm adapted to be engaged by said cam, a rod pivoted to rear end of said
25 arm and to the cover or to a projection from the cover and back of arm which carries cover, a crank extending downwardly from collar on shaft *E*, a bell-crank lever pivoted near forward part of the base, a rod connecting lower
30 end of said bell-crank and crank on said collar, a rod connected to upper end of said bell-crank, a guide for retaining said rod in a vertical position, and an operating-button on upper end of said rod.

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Witnesses:

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