Oct. 2, 1951 P. M. RESSINGER 2,569,690

DEVICE FOR REMOVING INK FROM FOUNTAIN PENS

Filed Nov. 22, 1948

Fig. 2

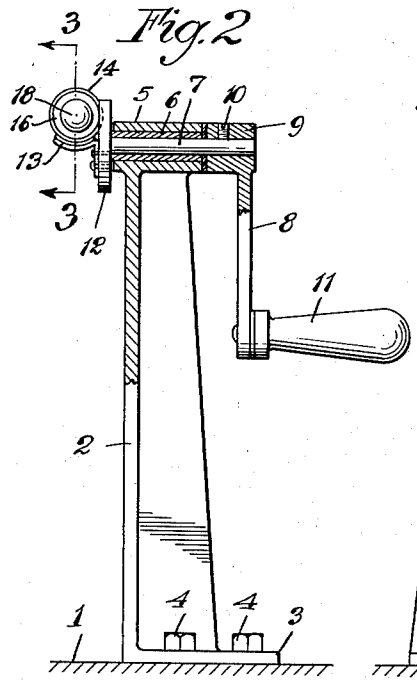


Fig. 1

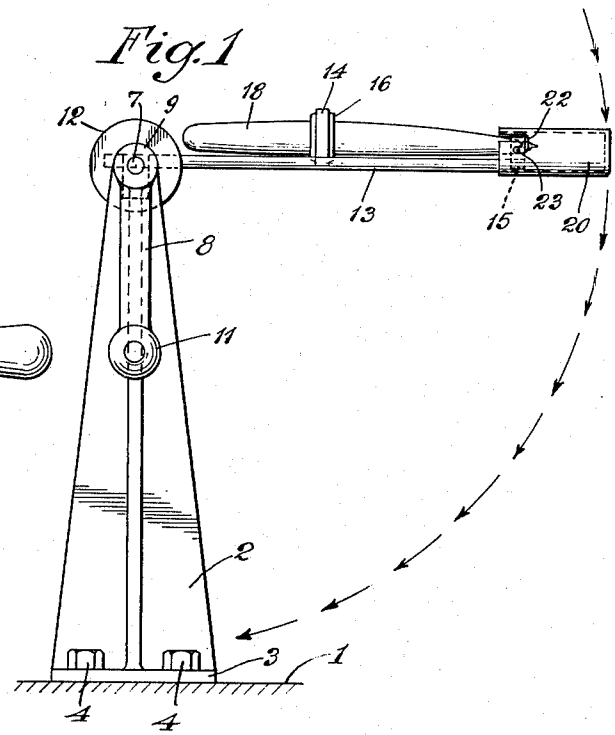


Fig. 3

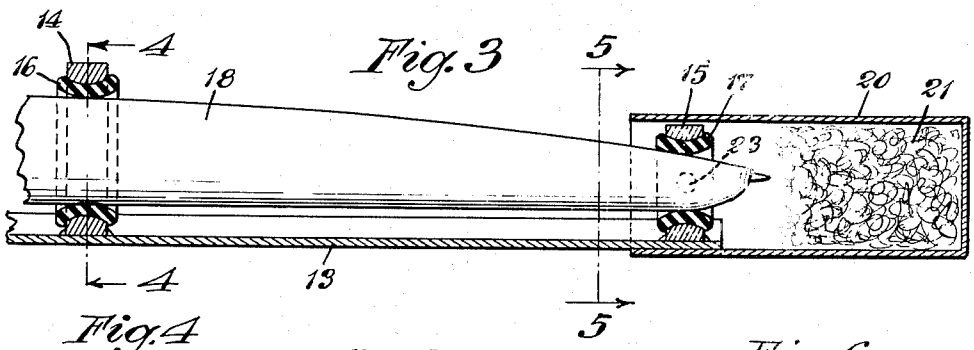


Fig. 4

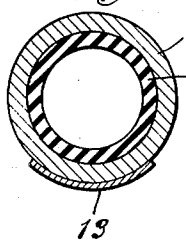


Fig. 5

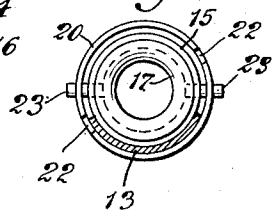
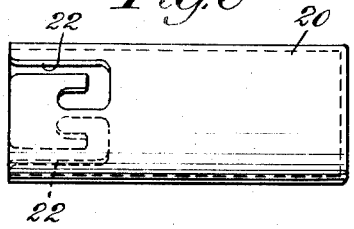


Fig. 6



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DEVICE FOR REMOVING INK FROM FOUNTAIN PENS

Paul M. Ressinger, Highland Park, Ill.

Application November 22, 1948, Serial No. 61,336

3 Claims. (Cl. 34—58)

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My invention relates to an improvement in devices for removing ink from fountain pens. One purpose is to provide such a device in which the ink in a fountain pen may centrifugally be removed.

Another purpose is to provide ready and manually operated means for centrifugally removing ink from fountain pens.

Another purpose is to provide a structure which is simple and easy to handle, and which may be installed on a counter or at a place convenient to a salesman for removing ink from fountain pens preparatory to the filling of the pens with some different ink.

Other purposes will appear from time to time in the course of the specification and claims.

I illustrate my invention more or less diagrammaticaly in the accompanying drawings wherein:

Figure 1 is a partial rear view;

Figure 2 is a vertical section of the structure shown in Figure 1;

Figure 3 is a section, on an enlarged scale, on the line 3—3 of Figure 2;

Figure 4 is a section on the line 4—4 of Figure 3;

Figure 5 is a section on the line 5—5 of Figure 3; and

Figure 6 is a detail.

Referring to the structure as shown in the drawings, 1 generally indicates any suitable base or suport. It may be a board, for example, which may be positioned upon a counter. Mounted on the board is any suitable base which, in the present instance, is shown as a bracket 2 having a bottom flange 3 through which may pass securing screws 4. 5 is a hub at the top of the bracket or support 2. 6 is a bearing sleeve.

Rotatable within the sleeve is a shaft 7 to which is secured a crank 8 by any suitable member 9 through which may pass a securing or set screw 10. 11 is any suitable handle which is preferably rotatable in relation to the crank 8. 12 is a rotor element mounted on and rotatable with the shaft 7, and rotatable at relatively high speed in response to manual rotation of the crank 8. As the operator rotates the crank, the handle 11 rotates and thus prevents binding or muscular resistance.

Extending outwardly from the rotor 12 is a radius member 13, shown as having a pair of rings 14, 15 lined with suitable material such as rubber or a rubber substitute, as at 16, 17. It will be understood that a fountain pen 18 may be inserted through the two rings, and is frictionally held in the position shown, by the rings 16 and 17. Since the ring 17 is of smaller diameter than

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the ring 16, it serves as a limit for preventing centrifugal outward movement of the pen 18.

20 is any suitable ink-receiving shell which may have therewithin fibrous material or blotting material, as at 21. The cap 20 may be provided with bayonet slots 22, adapted to receive any suitable pin 23 on the exterior of the ring 15. Thus the cap may be readily applied or removed. In the form herein shown I illustrate two of the slots 22, and two of the outwardly extending pins 23, as will be clear from Figures 5 and 6.

My device is particularly adaptable for use in the sale of fountain pen ink. For example, where a brand of pens is on sale, the dealer may wish to sell to the users of these pens the ink which is appropriate for such pens. However, the user in refilling the pen may have used some less advantageous ink, the dealer or salesman therefore wishes to clear from the interior of the pen the improper ink previously inserted. The fountain pen is simply inserted in the position in which it is shown in Figures 1 and 3, with the cap removed, and the user then rotates the fountain pen by rotation of the handle 11. The result is a very rapid rotation of the pen, which is effective to cause the ink to flow from the interior of the pen through the point and into the interior of the cap 20, and into the ink-receiving material 21.

Whereas I have shown an ink-receiving cap secured to the rotor, it will be understood that I find it equally practical to provide a larger container or receiver for the ink which may be, for example, in the form of a splatter band or wall, which may be lined with any appropriate ink-absorbing or receiving material. What is important is that I provide some means for receiving the ink which is centrifugally expelled from the interior of the pen as a result of the rotation of the pen around a center which is remote from the point of the pen. Whereas I have shown a direct drive, it will be understood that I may use any suitable gearing in order to multiply the movement or rotation of the pen in response to rotation of the manual member. It will be understood, also, that whereas I find it advantageous to employ a manually operated device, I may equally practically use a motor, for example, a small electrical motor controlled by any suitable switch. However, since the rotating means do not, of themselves, form part of the present invention, they are not herein shown.

It will be realized that whereas I have described and shown a practical and operative device, nevertheless many changes may be made in size,

shape, number and disposition of parts without departing from the spirit of my invention. I therefore wish my drawings to be taken as, in a broad sense, illustrative or diagrammatic rather than as limiting me to the particular disclosure of the present description and drawings. For example, the actual mechanism for rotating the fountain pen may be widely varied, and, as above pointed out, motor means may be substituted for the manual means.

It will be understood that, whereas, under some circumstances, it may be preferred to rotate the pen-carrying rotor about a horizontal axis, I do not wish my claims to be so limited, since centrifugal force, not gravity, is the factor which removes the ink from the pen.

I claim:

1. In a centrifugal device for removing ink from fountain pens, a base, a rotor mounted on the base for rotation about a predetermined axis, a securing connection on the rotor comprising a curved element lined with yielding material and slightly smaller in cross section than the pen and another such curved element smaller in cross section than the first named curved element and located farther from said axis than said first named curved element to secure a fountain pen

on said rotor with the point of the pen remote from the axis of rotation of the rotor, and a driving connection for the rotor.

2. The structure of claim 1 characterized by and including a receiver for the ink expelled centrifugally from the pen, said receiver being mounted on and rotatable with said rotor.

3. The structure of claim 1 characterized by and including a receiver for the ink expelled centrifugally from the pen, said receiver being removably mounted on and rotatable with said rotor and having an open end aligned with the point of the pen and ink-absorbing and receiving material in said receiver.

PAUL M. RESSINGER.

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