April 1, 1941. M. M. MALIS 2,237,155

PEN AND PENCIL CLIP AND THE LIKE

Filed May 31, 1940

Fig. 1.

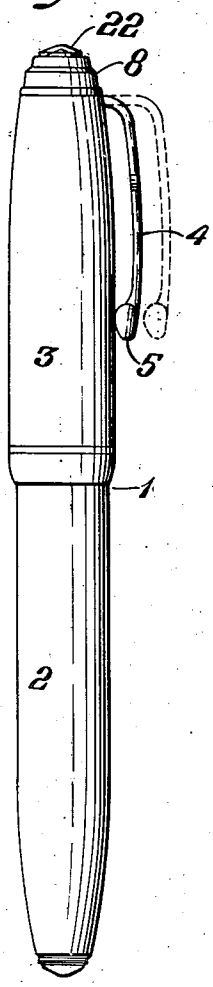


Fig. 2.

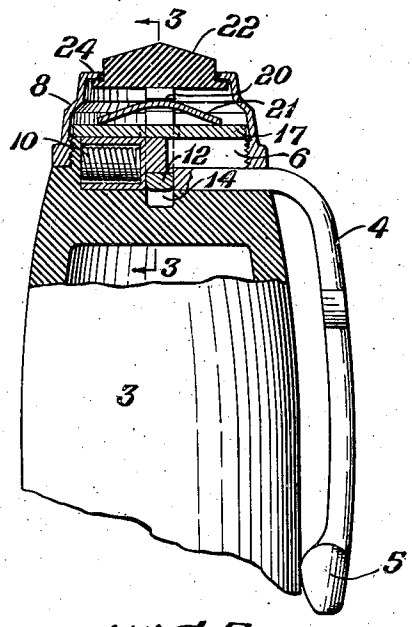


Fig. 5.

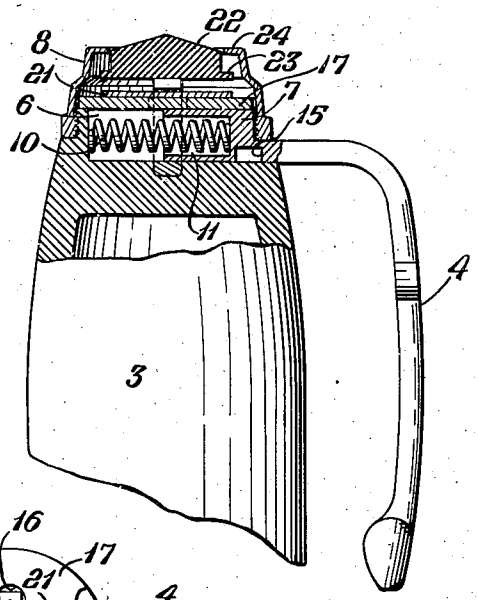
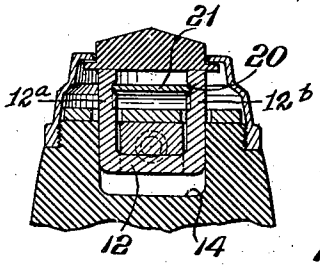


Fig. 3.



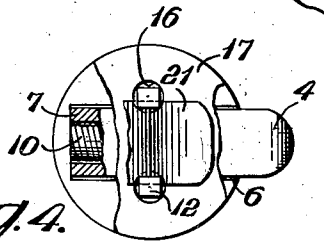


Fig. 4.

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PEN AND PENCIL CLIP AND THE LIKE

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9 Claims. (Cl. 24—11)

This invention relates to means for removably securing a pen, pencil or generally similarly shaped article to a relatively thin support such as the edge of a pocket or other part of a garment and provides improved mechanism whereby the clip may be readily released from the support and thereafter repositioned in gripping relation thereto without injury to the fabric or other material forming the support, yet with maximum simplicity of operation and convenience to the operator.

Pen and pencil clips of many types have been suggested but so far as I am aware none of them has been entirely satisfactory as some embody non-durable, usually complicated mechanism which quickly becomes inoperative through wear or breakage, others tend to damage the material of the garment adjacent the point of attachment and thus rapidly produce an unsightly appearance and at least some in each of these categories are so difficult to operate, even when in proper working order, that they are generally considered impractical.

It is therefore a principal object of the present invention to provide an improved clip for a pen, pencil or the like which can be conveniently operated to positively grip or release the support to which it serves to secure the pen or pencil and which does not subject the support to undue wear and/or strain when being gripped by or released from the clip.

A further object is to provide clip mechanism including a gripping member adapted to be released from gripping relation with its support by pressure of the finger upon a control element and restored to that relation by like pressure upon another part of the mechanism such as upon the gripping member itself.

A still further object is to provide a convenient releasable pen or pencil clip of the character aforesaid which is relatively inexpensive to manufacture and not likely to get out of order or become inoperative through normal use over an extended period of time.

Other objects, purposes and advantages of the invention will hereinafter more fully appear or be understood from the following description in which reference will be made to the accompanying drawing illustrating a preferred embodiment of the invention in operative association and combination with a fountain pen of a usual type.

Primarily it is to be understood, however, that the invention is equally applicable to fountain pens, pencils, clinical thermometer tubes and other generally similar articles so while for convenience of description I shall employ the term "pen" to generically designate the article, whatever be its specific character, with which the clip may be associated, I do not thereby intend to in any way restrict or confine the use of the invention to fountain or other pens.

Thus in the drawing

Fig. 1 is a side elevation of the pen, with the clip shown in operative position in full lines and in dotted lines in its released or inoperative position;

Fig. 2 is an enlarged fragmentary side elevation thereof, partly broken away into section to show internal construction and the positions of the parts when in said operative position;

Fig. 3 is a fragmentary vertical section on the line 3—3 in Fig. 2;

Fig. 4 is a fragmentary top plan detail with certain parts of the mechanism removed from the pen and

Fig. 5 is a view corresponding to Fig. 2 but showing the mechanism in the released or inoperative position indicated by dotted lines in Fig. 1.

In the several figures like characters are used to designate the same parts.

Referring now more particularly to the drawing, the pen 1, comprising a body 2 and cap 3 generally formed of hard rubber or other plastic, has attached to the closed end of its cap the mechanism now to be more fully described which includes a preferably resilient elongated clip 4 extending along the cap from adjacent its closed end toward its opposite end and generally parallel to its axis. The clip 4 carries a rounded boss 5 at its free end while its opposite end is bent inwardly substantially at a right angle and enters the interior of the cap through a groove 6 in which it is movable transversely of the cap; the extremity of the clip within the cap is enlarged into a head 7, preferably of generally rectangular cross section, which fits fairly snugly in the groove 6 but with sufficient clearance to be easily slidable therein. The clip is held in the groove partly through the medium of an internally threaded sleeve 8 screwed on the cap end with its edge overlying the adjacent inturned portion of the clip, and partly by other means disposed within the sleeve as will later appear.

A coil spring 10 is interposed between the head 7 and the adjacent end of the groove 6 or other suitable abutment and is desirably fitted in a circular bore 11 in the inner extremity of the head whereby the spring tends to force the clip outwardly from the position shown in Fig. 2 to that shown in Fig. 5, that is, from the full line

to the broken line position in Fig. 1. Movement of the clip in this direction is normally prevented, however, by releasable latching mechanism, including a generally U-shaped latch 12 movable transversely of the path of movement of the head in a correspondingly U-shaped groove 14 in the cap 3 and adapted to engage in a slot 15 in the head 7 to hold the clip in the position shown in Fig. 2.

The arms 12*a*, 12*b* of the latch 12 project beyond and on either side of the head and extend through holes 16 in a circular plate 17 overlying the groove 6 and resting on the adjacent end of the pen cap, and near their extremities these arms are provided with opposed notches 20 which receive the edges of a leaf spring 21, projecting oppositely outward from the latch and engaging with its ends the adjacent face of the plate 17. The spring 21 thus normally biases the latch toward engagement in the slot 15 and holds the plate 17 over the groove to form a top bearing for the head 7 of the clip. A button 22 seating on the extremities of the latch arms is provided for operating the latch against the bias of spring 21 and has a peripheral flange 23 disposed beneath a complementary flange 24 on the sleeve 8 which holds the button in the sleeve. The latch, when engaged in the slot 15 in the clip head 7 thus holds the latter retracted against the bias of its coil spring 10 until the latch is actuated by the button 22 to release the clip and allow the spring 10 to move it outwardly toward the position shown in Fig. 5. This movement is limited in extent by engagement of the end face of the head 7 with that portion of the inner face of the sleeve 8 which is aligned with the groove 6, and the clip thus cannot be released entirely from the pen, although the boss 5 is held far enough removed from its surface to avoid material friction and/or wear when the edge of a pocket or other part to which the pen has been or is being attached is withdrawn from or introduced between the boss and the cap.

Thus when the pen is placed in a pocket with the clip in the dotted line position of Fig. 1 the edge of the pocket can freely pass between the clip and the cap without imposing any strain on the material; the clip is then pressed inwardly toward the cap, preferably by applying the finger adjacent its curved part to move it against the force of the spring 10, until the latch, under the bias of its leaf spring 21, enters the slot 15 in the head. The boss 5 is thus brought toward the cap to firmly engage the fabric below the edge of the pocket and the latch thereafter holds the clip in its retracted or gripping position until again released by manipulation of the button 22.

The clip is readily released, however, by pressing the button 22 with the finger to permit the clip to spring outwardly sufficiently far to fully clear the boss 5 from the fabric and this can be done readily and with greatest convenience substantially in the same movement as that by which the pen is grasped to withdraw it. My clip therefore does not require careful or difficult manipulation to release it, nor to secure it when the pen is subsequently returned to the pocket as the fabric edge is of course very easily entered beneath the clip which is then at an appreciable distance from the cap; thereafter by merely pressing the clip inwardly until the latch 15 engages in the slot 16 the pen can be firmly re-secured in the pocket.

It will now be apparent that my clip when in operative combination with a pen, pencil or the like may be manipulated with maximum convenience and that the operations incident to securing the pen in the pocket or releasing it therefrom are so simple as to become almost at once substantially habitual or automatic. Furthermore, the fact that the clip has no appreciable frictional contact with the fabric while the pen is being placed in or withdrawn from the pocket although firmly gripping the fabric when the pen is in place, avoids the unsightly effects produced on the pocket edges by frictional drag of spring clips of the character heretofore in general use. Additionally my clip, while relatively inexpensive to manufacture and of durable construction, is relatively simple to dismantle and/or assemble in case replacement of any parts is ever required. The foregoing among other advantages, together with the attractive appearance of the mechanism as a whole, thus impart to it a distinct commercial appeal.

While I have herein described my invention with considerable particularity, especially as it may be embodied in a fountain pen, it will be understood that it may be utilized as well in association with other articles and that changes and modifications in the form, arrangement and specific relation of the several parts as well as in their several respective functions and operations will readily occur to those skilled in the art and may be made if desired without departing from the spirit and scope of the invention as defined in the appended claims.

Having thus described my invention, I claim and desire to protect by Letters Patent of the United States:

1. A clip for a pen or the like, comprising a movable clip arm extending along the pen, yielding means biasing the arm in one direction transversely of the pen and latching means for releasably restraining the arm against the bias of said means, the arm being disposed in gripping relation with the pen when restrained by the latch.

2. In a clip for a pen or the like a head movable transversely of the pen and an arm carried thereby extending along the pen, yielding means biasing the head and arm in one direction and spring pressed latching means engageable with the head for releasably restraining the head and arm against the bias of said yielding means.

3. In a clip for a pen or the like an arm movable into and out of gripping relation with the pen, supporting means therefor slidable transversely of the pen, means disposed within the body of the pen engageable with the supporting means for releasably holding the arm in gripping relation with the pen and means extending outwardly from the pen for actuating said holding means to release the arm.

4. In combination with a pen or the like a clip comprising an arm movable into and out of gripping relation with the outer surface of the pen and arm supporting means slidable transversely of the latter means within the pen engageable with the supporting means for releasably holding the arm in gripping relation with the pen, yielding means biasing the arm out of said relation and means operable from the end of the pen for moving said holding means out of engagement with the supporting means.

5. In combination with a pen or the like having a transverse groove near one end, a clip having parts extending respectively longitudinally and transversely of the pen, the transversely extending part comprising a head slidable in said groove,

yielding means biasing the head in one direction in the groove and releasable means adapted to engage the head to hold it against the bias of said yielding means with the longitudinally extending part of the clip in gripping relation with the pen.

6. In combination with a pen or the like having a transverse groove adjacent one end, a clip comprising a slotted head movable in opposite directions in the groove and an arm extending along the pen, a generally U-shaped latch engageable in the slot in the head, yielding means urging the latch towards the head, means projecting from the pen operable to move the latch in the opposite direction and other yielding means biasing the clip in a direction to carry the arm outwardly with respect to the pen when the latch is retracted from the slot, said latch being operative under the influence of the first yielding means to re-enter the slot and releasably hold the clip against said bias when the clip is moved in the opposite direction.

7. The combination with a pen or the like, of clip means comprising a clip arm extending along the pen and a part extending into and slidable transversely of the pen, spring means within the pen biasing said parts in a direction to move the arm away from the pen, a latch also within the pen normally operative to maintain the arm proximate the pen against the bias of said spring means, and means extending from the end of the pen operable to release the latch.

8. The combination with a pen or the like, of clip means comprising a head movable in opposite directions transversely within the pen and a clip arm projecting therefrom beyond the body of the pen and having a portion extending longitudinally of the latter, a spring biasing the head in a direction to move the arm away from the pen, a latch cooperative with the head to releasably maintain it in retracted position against said bias with the arm in gripping relation with the surface of the pen, a sleeve seated on the extremity of the pen, and means including a movable button projecting through the sleeve operable to release the latch and allow the spring to project the arm out of said gripping relation.

9. The combination with a pen or the like, of clip means comprising an arm extending along the pen and a part extending into and slidable transversely of the pen, a spring biasing the arm in a direction to move it away from the pen, a latch within the pen cooperative with said part to restrain the arm from movement under the bias of said spring, and spring pressed means projecting through the end of the pen operable when depressed to release the latch and enable the spring to move the arm outwardly to clear it from the pen, the latch being automatically operative to again restrain said part against movement after the arm is manually returned to initial position in opposition to the bias of said spring.

MORRIS M. MALIS.