

June 6, 1961

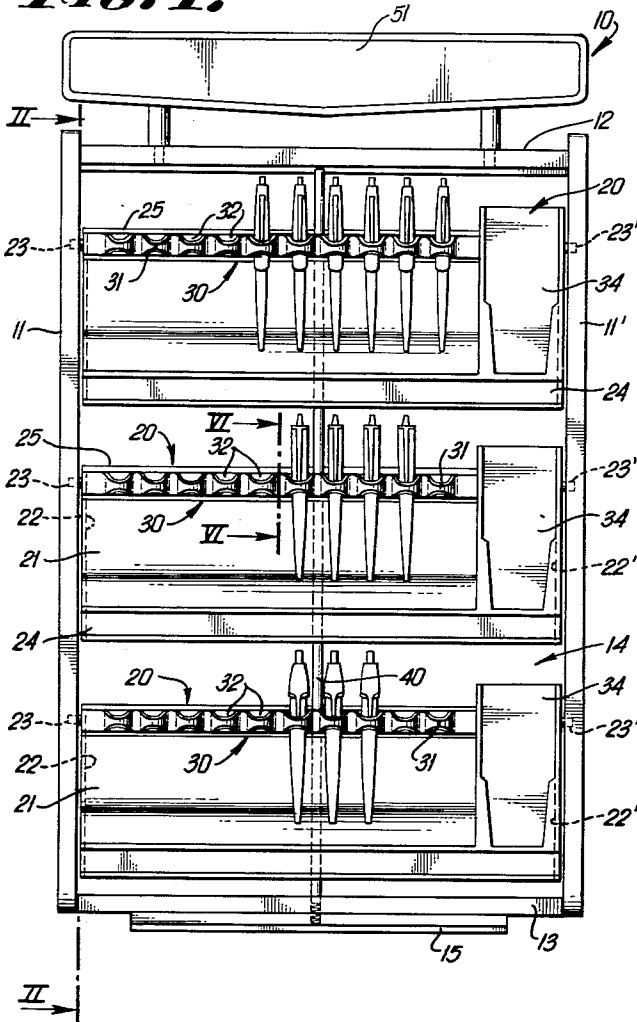
C. L. METZLER ET AL  
DISPLAY DEVICE

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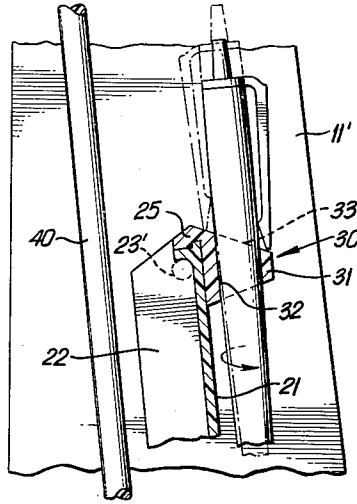
Filed Feb. 29, 1960

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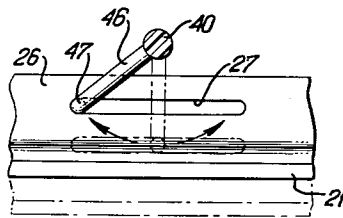
**FIG. 1.**



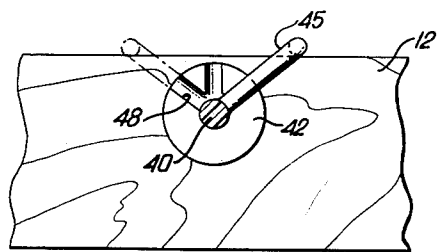
**FIG. 6.**



**FIG. 5.**



**FIG. 4.**



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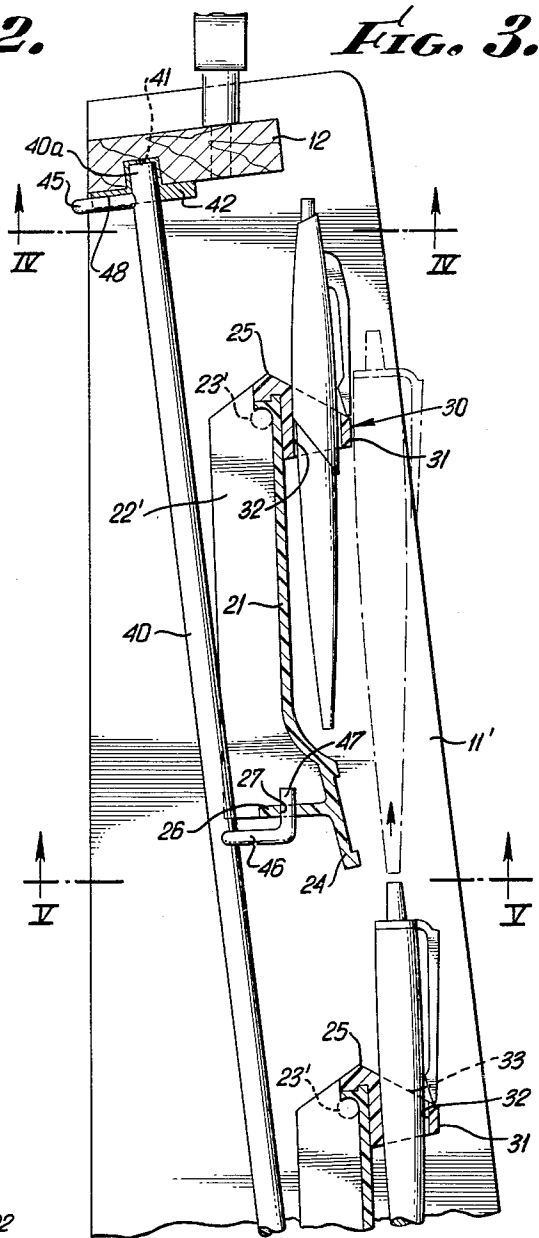
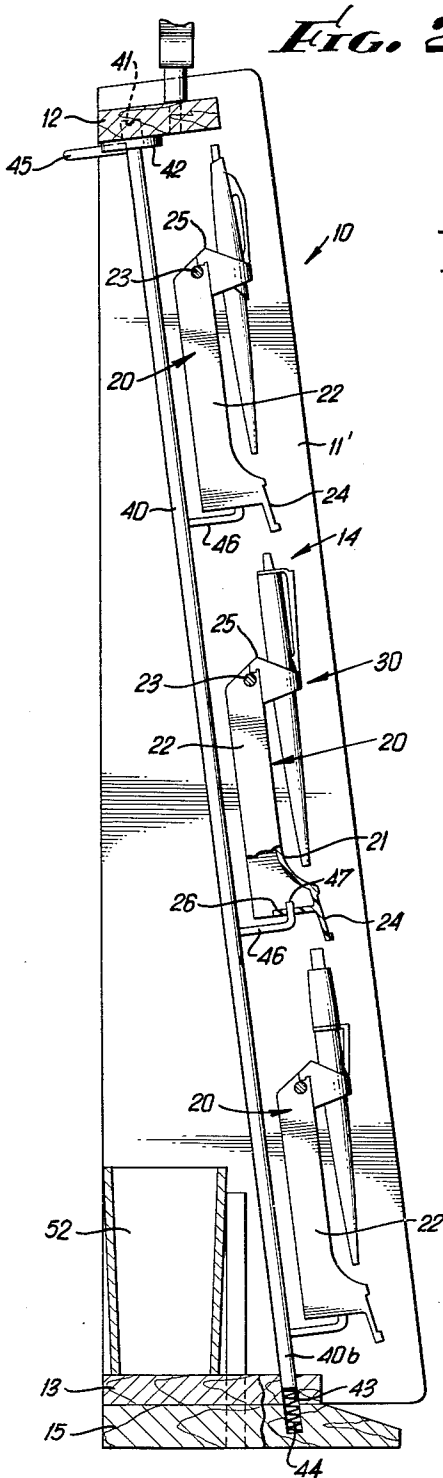
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2 Sheets-Sheet 2



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2,987,192

**DISPLAY DEVICE**

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Filed Feb. 29, 1960, Ser. No. 11,913

12 Claims. (Cl. 211-4)

This invention relates to a device for displaying articles in substantially uncovered, completely visible condition, and in particular a display device capable of selectively placing the articles so displayed in removable and non-removable conditions from the device.

In selling products or articles, it is advantageous to display them in prominent locations so that they will be readily accessible and easily seen. With relatively small articles, such as pens and pencils, the top of a counter or table is an ideal location for prominently exhibiting the articles and at the same time is a convenient location for salesmen or persons exhibiting the articles. The present display device is primarily adapted to be placed on the top of such a counter or table and to display elongated articles such as pens and pencils. However, it is contemplated that the present invention may be used for display devices adapted to rest on the floor or in other locations and that various articles other than pens and pencils may be displayed.

When relatively small articles, such as pens, are prominently displayed in easily accessible locations to the purchasing public, it has been found desirable to display these articles so that only authorized persons, such as salesmen, may permit the pens to be removed from the display devices. Such display devices should be pilfer-proof. Due to the continuous handling of the prominently displayed articles, it has also been found desirable to provide article-holding means for automatically orienting the articles so that the front of each article will be constantly displayed despite the manner or position in which the article is initially inserted into the article-holding means. The present invention provides automatic means whereby any elongated article having a laterally projecting part in the upper portion of its length (such as a clip carried by a ball point pen or a pencil) will be automatically gravitationally oriented in the display device, thereby permitting such articles to be displayed in an orderly, side-by-side relation and automatically return to such oriented position after being moved, handled or temporarily displaced from such orderly array.

An object of the present invention is to provide a novel device for displaying articles.

Another object is to provide a device for primarily displaying elongated articles, such as pens, the device being capable of performing all of the desirable functions stated hereinabove.

Another object is to provide a device for displaying articles and for placing the articles so displayed selectively in removable and non-removable positions from the device.

An object is to provide a display device for articles whereby the articles are displayed in an uncovered but pilfer-proof condition and may only be removed by adjusting the device to a discharge position.

A further object is to provide a novel article-receiving and holding means for automatically orienting an article adapted to be held thereby regardless of the position in which the article is initially inserted into the holding means.

Still another object is to provide a device for displaying articles, which is economically produced, easily assembled and is extremely attractive in appearance.

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Other objects and advantages of this invention will be readily apparent from the following description when considered in connection with the appended drawings.

In the drawings:

FIG. 1 is a front elevation of an exemplary device of the present invention;

FIG. 2 is a vertical section of the device taken along plane II—II of FIG. 1 with the pens in a non-removable, display position;

FIG. 3 is a fragmentary, enlarged vertical section of the device of FIG. 1, similar to FIG. 2 but with the pens in a removable, discharge position;

FIG. 4 is a transverse section of the device taken along plane IV—IV of FIG. 3;

FIG. 5 is a transverse section of the device taken along plane V—V of FIG. 3; and

FIG. 6 is an enlarged, vertical section of the device taken along plane VI—VI of FIG. 1.

As shown in the drawings, the exemplary display device 10 is illustrated for displaying elongated articles such as pens in a substantially uncovered condition, although it is understood that other articles may also be exhibited by a device of the present invention.

The device 10 may have a supporting frame including horizontally spaced, vertically extending side members 11 and 11' rigidly connected together by vertically spaced, horizontal top member 12 and horizontal bottom member 13. The sides, top and bottom members are joined together by any suitable means and provide an open central area 14 for receiving any number of horizontal, longitudinally extending racks 20 for holding and displaying the pens. A base member 15 may be provided for supporting the frame and may include legs or may be legless, as shown.

A plurality of horizontal racks 20 are provided within the supporting frame in parallel, vertically spaced relation and are pivotally mounted on said frame about horizontal axes. As each rack 20 is preferably identical, the details of only one rack will be described.

A rack 20 is open-faced and may include a horizontally extending, substantially vertical back panel 21 having rearwardly extending side flanges 22 and 22' at its ends. The rack is of sufficient length to be positioned between the side members 11 and 11' of the supporting frame. Butt shafts or pivot pins 23 and 23' may be provided on the side flanges 22 and 22', respectively, and are pivotally receivable in horizontally aligned openings on the inner surface of the side members 11 and 11', respectively, for pivotally mounting the rack 20 on the supporting frame. A single shaft may also be used for pivotally carrying a rack 20 on the frame.

The back panel 21 of a rack 20 is provided with a lower forwardly-extending foot portion 24 and an opposing upper, unobstructed edge portion 25. The rear side of the back panel 21 may be provided with a substantially horizontal ledge or lip 26 having a straight, horizontally extending slot 27 therethrough.

Each rack 20 is provided with means 30 for receiving and holding a plurality of articles in vertically parallel side-by-side relation in front of the panel 21. Such article-receiving and holding means 30 may comprise a strip or member 31 (preferably of transparent material such as styrene or methacrylic resinous plastic) provided with a plurality of substantially parallel article-receiving passageways 32 having vertical axes. The marginal portions 33 surrounding the upper end of each passageway are forwardly and downwardly inclined to form a guiding surface adapted to engage a portion of an article being displayed and orient the article. Most writing instruments carry a clip, and while the body of such instrument is slidably received in a passageway 32, the end of a clip will contact incline 33 and regardless of the

manner in which the pens are placed and received in the passageways 32, the clips of the pens will be guided into a uniform position with the clip facing the front of the device. This eliminates constant attention by a salesman or the like in maintaining the pens in a position with all of the clips facing forward. The holding members 30 and the foot portion 24 on each rack cooperate to prevent withdrawal of an article toward the foot portion 24. Articles are therefore only capable of being withdrawn from the members 30 upwardly toward the unobstructed edge portion 25.

The front surface of the back panel 21 of each rack 20 may also be provided with a pocket 34 for receiving and holding related attachments for the articles to be displayed, such as packages of ink refills or cartridges for ball-point pens.

As best seen in FIGS. 2 and 3, the racks 20 are vertically spaced and pivotally carried on the supporting frame so that the pens are adapted to be moved between a non-removable, display position (FIG. 2) and a removable discharge position (FIG. 3). In the display position (FIG. 2) the racks 20 are carried on the supporting frame so that the upper unobstructed longitudinal edge 25 of a lower rack is in proximity to and below the forwardly extending foot portion 24 of an upper rack. The pens are therefore obstructed or prevented by the foot portion 24 of an upper rack from being withdrawn from a lower rack. The uppermost rack 20 is pivotally carried by the frame so that its upper unobstructed edge 25 is in proximity to and below the horizontal top member 12 in the display position.

It is therefore seen that the foot portion 24 of each rack 20 and the horizontal top member 12 actually constitute horizontal stop members carried by the supporting frame for obstructing and preventing the removal of articles from racks when they are in the display position. Such stop members are so spaced from the holding and orienting means 30 so as to permit a customer to touch, finger and move the writing instrument vertically and about its axis, but such movement is limited by the stop to prevent complete withdrawal, removal or pilfering.

Any suitable means may be provided for selectively moving the racks from the display position to a discharge position (FIG. 3) wherein the racks 20 are shown to have been pivoted about their pivotal axes a sufficient distance so that the receiving and holding means 30 are in such position with relationship to the stop members to permit axial, upward removal of the articles. As seen in FIG. 3, the upper, unobstructed edge 25 of a lower rack 20 has been moved forwardly of the foot portion 24 of an upper rack to allow a pen to be moved from engagement with the holding member 31 to a position above the member 31 as shown by the phantom outline. It is understood that in the discharge position, the upper, unobstructed edge 25 of the uppermost rack 20 has also been moved relatively to the horizontal stop and top member 12 to allow a pen to be removed from the uppermost rack.

In one of its broadest concepts, the present invention includes a selectively operable means for selectively changing the relative positions of the stop members and the upper longitudinal edge portions 25 of the racks between the display position and the discharge position, permitting removal of the articles or pens from the racks. Moreover, such selectively operable means may lock the racks in the selected display or discharge positions. A preferred simple form of such means comprises an elongated substantially vertical actuating rod 40 pivotally mounted between the top frame member 12 and bottom frame member 13. The upper end 40a of the rod 40 may be received within a recess 41 in the top member 12 and firmly but rotatably held therein by a ferrule 42. The lower end 40b of the rod 40 is received in a recess 43 in the bottom frame member 13 and may rest

upon a coiled spring 44 mounted within the recess 43 for allowing the rod 40 to be easily assembled within the recesses 41 and 43. An actuating bar or handle 45 may be provided on the rod 40 for rotating the rod and holding it in partly rotated position.

The lip of ferrule 42 may be provided with radial recesses 48, such recesses receiving handle 45 under the biasing influence of spring 44. The rod 40 may be inclined to the vertical and in the display position of the racks may be substantially parallel to the back panels 21 of the racks.

Means are provided to translate rotational movement of the rod 40 into pivotal movement of the racks between display and discharge positions. Such means may include a forwardly-extending lever arm 46 carried by rod 40 for each rack 20, each arm having an upwardly-extending finger 47 adapted to be movably received in and cooperate with the slot 27 in the ledge 26 on the rear of each rack 20. When the racks are in the display position the fingers 47 are positioned substantially in the center of the slots 27 (dash line position in FIG. 5) and in the discharge position the fingers 47 are adapted to be rotated to and limited in movement by either end of the slots 27 (FIG. 5), thus pivoting the racks about their horizontal pivotal axes and drawing the foot portions 24 toward the rod 40. It is to be noted that when in display position the lever arms 46 are on dead center; a customer (or prospective pilferer) cannot cause relative movement between the rack and its stop by applying pressure to the rack.

The recesses 48 in the lip of ferrule 42 are angularly related to the angles assumed by levers 46 at the ends of their travel and in the dash line or display position; when the handle 45 is in the recess corresponding to the dash line or display position, a poacher cannot apply force to a rack and cause it to pivot into a position permitting the poacher to remove an article from the rack. A salesperson, however, can readily apply downward and rotational force to handle 45, overcome the bias of spring 44, rotate rod 40 and pivot the racks into article-discharging position.

A panel 51 for advertising matter may be provided on the supporting frame and secured thereto by any well known means. A reserve supply container 52 may also be provided on the bottom member 13 behind the racks 20.

It is thus seen that the display device 10 allows a plurality of pens or other articles to be displayed (FIG. 2) in an uncovered condition without the possibility of the articles being removed until they are moved to a discharge position (FIG. 3). The actuating rod 40 is only accessible from the rear of the device and is concealed from the open face of the rack thereby preventing purchasers or unauthorized persons from removing the pens from the racks until permitted to do so by the racks being moved to the discharge position. This is quickly and easily performed by the turning of the rod 40 causing the fingers 47 to pivot the racks 20 about their pivotal axes, resulting in relative movement between the lower foot portion 24 of an upper rack and the unobstructed upper edge 25 of a lower rack. Pens are therefore removable from the racks by a person standing in front of the device. Regardless of how the pens are inserted into the article-holding means 30, the pens are self-oriented so that the clips face toward the front.

It is contemplated that the frame members and racks may be made of relatively inexpensive material, such as plastics which are easily moldable. In addition, it is preferred that the article-holding means 30 be transparent so that the full outline of the pens or articles may be seen. The material used for the device may be colored to present an attractive and pleasing display.

The device of the present invention is susceptible of many modifications. The upper, unobstructed edge portion 25 may be in the same plane as the main portion of

back panel 21; although the lower portion of the back panel is preferably provided with a forwardly extending foot portion 24 (thereby precluding any attempt to remove a writing instrument in a downward direction) such lower portion need not have the downwardly extending front-facing strip (ordinarily used for advertising material) and instead include a longitudinal, rearwardly extending stop-foot which may be in a plane parallel to ledge or lip 26 or constitute an extension of such ledge or lip. The precise location of the pivot axis of pins 23 and 23' (with respect to top and bottom of a rack 20) may be varied. The rack and holding means 30 may be molded from plastic composition as a unitary element.

Obviously many modifications and variations of the present invention are possible in the light of the above teachings. It is therefore to be understood that within the scope of the appended claims the invention may be practiced otherwise than as specifically described.

We claim:

1. A device for displaying a plurality of elongated articles in substantially uncovered condition and for placing the articles so displayed selectively in removable and non-removable condition from such display device, comprising: a supporting frame including an upper, horizontally extending stop member; a plurality of longitudinally extending racks pivotally mounted about parallel horizontal axes on said frame in parallel, vertically spaced relation; each of said racks being open-faced and having a back panel provided with a lower forwardly extending foot portion and an opposing upper unobstructed edge portion, and means for receiving and holding a plurality of elongated articles in vertically parallel, side-by-side relation in front of said back panel; the upper unobstructed longitudinal edge portion of the lower of said racks being in proximity to the foot portion of an upper rack when said racks are in display position, whereby the withdrawal of an article from said lower rack is obstructed by the foot portion of an upper rack, and selectively operable means for pivotally moving said racks on said supporting frame to a discharge position whereby an article may be withdrawn from a lower rack without obstruction by the foot portion of an upper rack.

2. A device as stated in claim 1 wherein said receiving and holding means comprise a substantially transparent member provided with an article-receiving passageway, marginal portions of said member surrounding the upper end of said passageway being inclined and adapted to guidingly contact a portion of an article in said passageway and orient the article with respect to the back panel.

3. A device as stated in claim 1 wherein the selectively operable means move said racks between a display position and a discharge position and are adapted to lock said racks in said positions selectively.

4. A device as stated in claim 1 wherein the selectively operable means move said racks between a display position and a discharge position and comprise an actuating rod movably mounted on said supporting frame, and lever means carried by said rod and cooperating with said racks to translate movement of the rod into pivotal movement of said racks.

5. A device for displaying a plurality of elongated articles in substantially uncovered condition and for placing the articles so displayed selectively in removable and non-removable condition from such display device, comprising: a supporting frame including an upper, horizontally extending stop member; a plurality of longitudinally extending, horizontal racks pivotally mounted on said frame in parallel, vertically spaced relation; each of said racks being open-faced and having a back panel provided with a lower, forwardly-extending foot portion and an opposing upper, unobstructed edge portion, and means for receiving and holding a plurality of elongated

articles in vertically parallel, side-by-side relation in front of said back panel, said latter means including a member having a vertical article-receiving passageway, marginal portions of said member surrounding the upper end of said passageway being inclined and adapted to guidingly contact a portion of an article in said passageway and self-orient the article with respect to said back panel; the upper unobstructed longitudinal edge portion of the lower of said racks being in proximity to the foot portion of an upper rack when said racks are in a display position, the upper unobstructed longitudinal edge portion of the upper of said racks being in proximity to said stop member when said racks are in the display position, whereby the withdrawal of articles from said lower rack is obstructed by the foot portion of an upper rack and from said upper rack is obstructed by said stop member, and selectively operable means for pivotally moving said racks on said supporting frame to a discharge position whereby articles may be withdrawn from a lower rack and said upper rack without obstruction by said foot portions and stop member.

6. A device for displaying writing instruments, each provided with a clip, in a side-by-side, readily visible substantially uncovered condition in which both ends of such writing instruments are visible and the instruments may be fingered and moved by a customer but are restrained from unauthorized removal from the display device, comprising: a supporting frame; a substantially horizontal member carried by the frame, said member being provided with a plurality of horizontally spaced vertical passageways, each adapted to freely receive, support and substantially encircle a section of the lower portion of a writing instrument; a horizontally extending stop element in spaced relation to and above said member and writing instruments supported in the passageways thereof to permit limited upward axial movement of writing instruments encircled and retained by said member but preventing withdrawal of such instruments therefrom; and selectively operable means to change the relative positions of said member and stop element to permit withdrawal of a writing instrument from the member by axial movement of a writing instrument.

7. A device as stated in claim 6 wherein said horizontal member is transparent and is mounted for movement about a horizontal axis, whereby said member and writing instruments supported thereby may be moved about such horizontal axis by the selectively operable means to a position to permit removal of a writing instrument from such member.

8. A device as stated in claim 6 wherein said horizontal member is mounted for movement about a horizontal axis and said selectively operable means comprise an actuating rod journaled in the supporting frame and lever means carried by the rod and cooperating with said member to translate partial rotation of said rod into movement of said horizontal member.

9. In a device for displaying elongated articles in a side-by-side substantially uncovered condition wherein both ends of the articles are visible said articles being uniformly oriented about their respective longitudinal axes, each of said articles having a laterally projecting part in the upper portion of its length, the provision of: a substantially horizontal member provided with a plurality of spaced vertical passageways, each adapted to freely receive and substantially encircle a section of the lower portion of an elongated article, whereby said article may be grasped, rotated and moved axially while still encircled by said member; a marginal portion of said member adjacent the upper end of each passageway including downwardly inclined and converging surfaces adapted to guidingly contact a laterally extending part of an article placed into a passageway to gravitationally self-orient the article displayed in such member.

10. A device for displaying writing instruments, each

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provided with a clip, in a side-by-side readily visible substantially uncovered condition in which such writing instruments may be fingered and moved by a customer but are prevented from unauthorized removal from the display device, comprising: a supporting frame; a substantially horizontal member carried by the frame, said member being provided with a plurality of horizontally spaced, vertical passageways, each adapted to freely receive and substantially encircle a section of the lower portion of a writing instrument, a marginal portion of said member adjacent the upper end of each passageway including downwardly inclined and converging surfaces adapted to guidingly contact the end of a clip of a writing instrument placed into such passageway to gravitationally self-orient the writing instrument about its axis; a horizontally extending stop element above said member; and selectively operable means for selectively changing the relative positions of said member and stop element from a position wherein writing instruments held by said member are restrained by said stop element from withdrawal from passageways in such member to a position where writing instruments may be withdrawn by axial movement from such member.

11. A device for displaying writing instruments, each provided with a clip, in a side-by-side, readily visible substantially uncovered condition in which both ends of such writing instruments are visible and the instruments may be fingered and moved by a customer but are restrained from unauthorized removal from the display device, comprising: a supporting frame; a plurality of horizontally extending, vertically spaced, parallel racks mounted on

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said frame, each of said racks including a horizontal member, mounted for movement about a horizontal axis; each of said horizontal members being provided with a plurality of horizontally spaced vertical passageways, each adapted to freely receive, support and substantially encircle a section of the lower portion of a writing instrument; each of said racks including a lower, forwardly extending foot portion in spaced relation to and above a horizontal instrument-receiving member of a lower rack to permit limited upward axial movement of instruments in such member of a lower rack while obstructing and preventing withdrawal of instruments therefrom; and selectively operable means to move said horizontal members about their respective axes into a position wherein writing instruments may be axially withdrawn from said members without obstruction by the foot of an upper member.

12. A device as stated in claim 11 wherein a marginal portion of each of said members adjacent the upper end of each passageway includes downwardly inclined converging surfaces adapted to guidingly contact the end of a clip of a writing instrument placed into such passageway to gravitationally orient the writing instrument about its axis.

#### References Cited in the file of this patent

##### UNITED STATES PATENTS

|           |            |               |
|-----------|------------|---------------|
| 2,334,839 | Purchas    | Nov. 23, 1943 |
| 2,505,510 | Vermillion | Apr. 25, 1950 |
| 2,916,156 | Larson     | Dec. 8, 1959  |