June 13, 1939. D. K. COPELL 2,161,855

SUPPORT

Filed April 16, 1937

Fig. 1

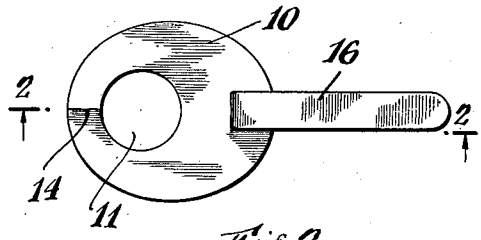


Fig. 3

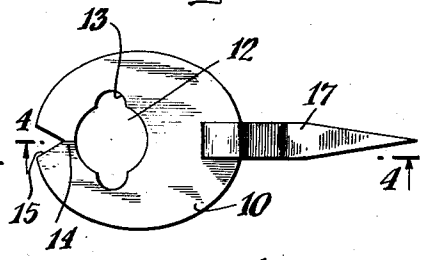


Fig. 2

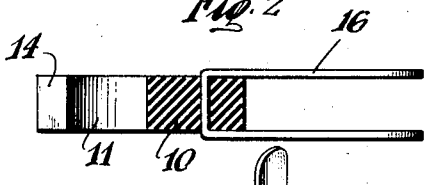


Fig. 4

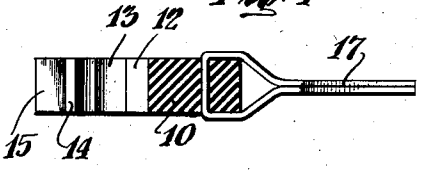


Fig. 5

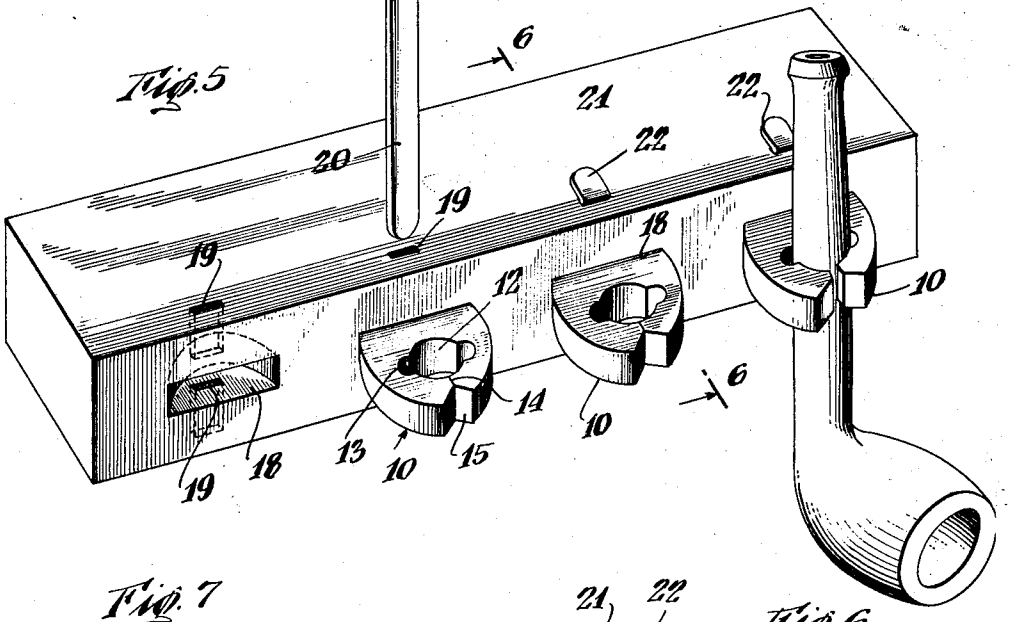


Fig. 7

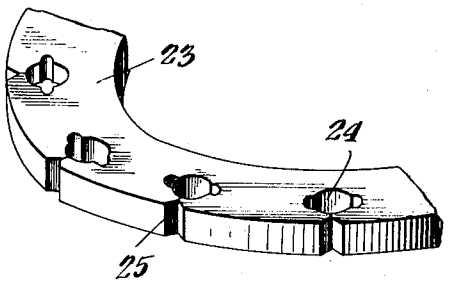
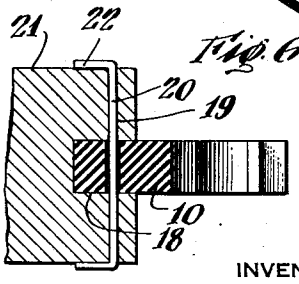


Fig. 6



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SUPPORT

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Application April 16, 1937, Serial No. 137,162

5 Claims. (Cl. 248—309)

This invention relates to a structurally and functionally improved support and in its more specific aspects aims to provide a support which may be utilized for general purposes, but which is primarily intended to be employed in connection with display work.

An object of the invention is that of furnishing a support with which articles may readily be associated and from which these articles may be removed with facility when it becomes desirable to effect such removal.

A further object is that of providing a support which, after an article has been associated with it, will, under all reasonable conditions, retain such article against accidental displacement and which, moreover, will attractively support the article during this period.

A still further object is that of constructing an element of this nature with which articles having extremely critical finishes may be associated without there being any danger of the finish being marred or otherwise affected by contact with the support.

Another object is that of furnishing a support which will be of extremely simple construction and which may readily be associated with any type of mounting member and which, when so associated, will remain operative for indefinite periods of time.

With these and other objects in mind, reference is had to the attached sheet of drawing, illustrating practical embodiments of the invention, and in which:

Fig. 1 is a plan view of one form of support;

Fig. 2 is a sectional view taken along the line 2—2 and in the direction of the arrows of Fig. 1;

Fig. 3 is a plan of a second form of support;

Fig. 4 is a sectional side view taken along the lines 4—4 and in the direction of the arrows indicated in Fig. 3;

Fig. 5 is a perspective view of a mounting member, showing a number of supports in association therewith;

Fig. 6 is a fragmentary transverse sectional view taken along the line 6—6 and in the direction of the arrows as indicated in Fig. 5, and

Fig. 7 is a fragmentary perspective view of a still further form of support, as constructed in accordance with the teachings of the present invention.

Viewed in one of its more simple forms, a support constructed in accordance with the present invention may include, as shown in Figs. 1 to 5, a body 10, preferably of rubber or similar material, and formed with an opening which may be located off center. This opening 11, as viewed in Figs. 1 and 2, may be substantially circular, or as viewed at 12, in Figs. 3 and 4, may be circular with recesses 13 at diametrically opposite points in its edge portion.

A support of this type may be utilized for the mounting of any number of articles. To mention a few of the same, one only has to consider pipes, tooth brushes, toilet appliances and similar elements involving a body capable of being accommodated within openings 11 and 12. It is found that to all practical purposes a circular opening such as 11 usually suffices to accommodate the article but in specialized circumstances (particularly where the article is somewhat oval in cross-section) a suitable number of indentations or notches 13 are desirable. It will be apparent in connection with these that the article, if of the outline described, may be inserted with its edge portions extending at right angles to the notches 13 and after the article is otherwise properly positioned it may be turned to have its edge portions extend within the recesses or indentations. In this manner the mounting member or support will be maintained substantially free from distortion and will accordingly not present an unsightly appearance.

Now with a view to permitting of a ready association of articles with these supports as well as a ready removal of such articles therefrom, it will be seen that in accordance with the teachings of the present invention the body 10 has been slitted, as indicated at 14. This line of severance extends from the outer edge of the body to the opening formed therethrough and due to the elastic and resilient nature of the body, it is apparent that if an operator brings the surface of an article to be supported into firm contact with the body and in line with this slit, the edge portions defining the opening will separate, allowing the article to readily shift into the opening or bore 11. In fact, as indicated in Figs. 3 and 4, the portions of the slit adjacent the outer edge of the body may extend angularly with respect to each other, so as to furnish a tapered slot 15 serving to guide the article into the slit 14 so that it may enter the opening 12. As a consequence of this construction, it will be understood that the operator does not have to grip or otherwise manipulate the body 10, presuming that the same is properly supported, but by simply shifting an article to be supported relatively to this mounting member, the article may be properly associated therewith.

In order to mount the supporting member or

unit 10, the latter may be formed with a further opening to the rear of openings 11 and 12. Through this further opening there is threaded a strip of metal 16 which, as shown in Figs. 1 and 2, may have blunt end portions. Such a strip is obviously desirable for application through a mounting card or similar element. As shown at 17 in Figs. 3 and 4, the strip may have its body bent inwardly with its end portions in face to face contact and the ends of these end portions may be pointed. In this manner a spike-like element is furnished which may be embedded in a mounting surface and incident to the face to face contact of the ends of the strip there would be little if any danger of this part buckling as it is driven home in a supporting body. Of course, if a body is of relatively soft material, it may not be necessary or desirable to have the ends of the strip in contact with each other, this being obviously a matter of discretion according to the particular association with which the support is to be employed.

As viewed in Fig. 5, supports of this nature may be associated with a mounting member presenting a suitable number of recesses 18. While these recesses may be of an area equal to the rear portion or end of the support, they may equally well be slightly smaller than the adjacent edge of the body 10. In this manner such body will be placed under slight compression. Accordingly, the edge portions, as defined by the slit, will be pressed into intimate contact with each other and what might be termed the arms of the body will grip with even greater firmness the shank of an article to be mounted. Also, where a mounting member such as that illustrated is employed, its body may be formed with openings 19 intersecting the recesses 18 and in line with the strip accommodating opening of body 10 when the latter is projected into the recess. Accordingly, a strip 20 may be threaded through opening 19 and as shown in Figs. 5 and 6 may have its body extending through the opening in body 10 to lock the latter against displacement with respect to mounting member 21. The ends of the strip may obviously be bent to prevent displacement of the parts and as especially shown at 22 in Fig. 6.

Of course, the mounting member may take various other forms. For example, it is entirely feasible to provide a body 23 of rubber or similar material and which is formed with a series of openings 24 of any proper configuration, these openings communicating with the outer edge of the body by means of slits 25 which may have their outer surfaces flared. In this manner a guiding structure similar to that shown in Figs. 3 to 6 is presented, which will allow of ready application of articles to the body. It is obvious that the advantages inherent to the structures as afore described will also be present in the unit as illustrated in Fig. 7 and that this unit may, as shown, have its body curved or be of any other desired configuration.

From the foregoing it will be appreciated that in all the several forms of the invention an article may readily be applied to or removed from the support. When so applied the arms of the mounting will be separated to a greater or lesser extent depending largely upon the diameter of the article which is being supported. However, regardless of the degree of such separation, it is to be understood that the arms will constantly tend to move inwardly, so that the surface of the article will be frictionally gripped and the latter will be properly supported. Such support is particularly effective, due to the relatively reduced edge portions where notches 13 or their equivalents are employed, in that the inherent resiliency of the arms will tend toward proper and intimate contact of the edge portion thereof with the article. After the article has been removed from the support, the arms will, of course, spring back to their initial position so that a somewhat ring-like body is again presented, as indicated in the left-hand side of Fig. 5.

Thus, among others, the several objects of the invention as afore noted are achieved. It will be obvious that numerous changes in construction and rearrangements of the parts may be resorted to without departing from the spirit of the invention as defined by the claims.

Having thus described the invention, I claim:

1. A support including a relatively thin rubber body formed with an aperture to receive an elongated article having a diameter greater than that of the aperture, said body being slitted from its outer edge through to said aperture to provide a pair of arm portions to each side of said slit, said slit affording a passage for the insertion of the article within the aperture by bringing said article to a point adjacent the outer end of said slit and pressing the same inwardly towards the axis of said aperture while wiping said article along the edge of said body whereby said arm portions will be flexed out of their normal plane to widen the gap provided by said slit to an extent such that the article may be received within said aperture, the resilience of the rubber being sufficient to firmly grip against displacement an article disposed within said aperture.

2. A support including a relatively thin rubber body formed with an aperture to receive an elongated article having a diameter greater than that of the aperture, said body being slitted from its outer edge through to said aperture to provide a pair of arm portions to each side of said slit, said slit affording a passage for the insertion of the article within the aperture by bringing said article to a point adjacent the outer end of said slit and pressing the same inwardly towads the axis of said apeture while wiping said article along the edge of said body whereby said arm portions will be flexed out of their normal plane to widen the gap provided by said slit to an extent such that the article may be received within said aperture, the resilience of the rubber being sufficient to firmly grip against displacement an article disposed within said aperture, and said body being formed in its outer edge with mutually converging surfaces to either side of said slit to furnish a guide for the article as it is being placed in association with the body.

3. A support including a relatively thin rubber body formed with an aperture to receive an elongated article having a diameter greater than that of the aperture, said body being slitted from its outer edge through to said aperture to provide a pair of arm portions to each side of said slit, said slit affording a passage for the insertion of the article within the aperture by bringing said article to a point adjacent the outer end of said slit and pressing the same inwardly towards the axis of said aperture while wiping said article along the edge of said body whereby said arm portions will be flexed out of their normal plane to widen the gap provided by said slit to an extent such that the article may be received within said aperture, the resilience of the rubber being sufficient to firmly grip against displacement an article disposed within said aperture, and said body

being formed with recesses in the edge of the aperture and to either side of said slit whereby to enhance the flexibility of said arm portions.

4. A support including a relatively thin rubber body formed with an aperture to receive an elongated article having a diameter greater than that of the aperture, said body being slitted from its outer edge through to said aperture to provide a pair of arm portions to each side of said slit, said slit affording a passage for the insertion of the article within the aperture by bringing said article to a point adjacent the outer end of said slit and pressing the same inwardly towards the axis of said aperture while wiping said article along the edge of said body whereby said arm portions will be flexed out of their normal plane to widen the gap provided by said slit to an extent such that the article may be received within said aperture, the resilience of the rubber being sufficient to firmly grip against displacement an article disposed within said aperture, and the aperture through said body being eccentrically disposed with reference to the outer edges of said body, the maximum width of said body, between its aperture and outer edge, being substantially diametrically opposite said slit.

5. A support including a relatively thin rubber body formed with an aperture to receive an elongated article having a diameter greater than that of the aperture, said body being slitted from its outer edge through to said aperture to provide a pair of arm portions to each size of said slit, said slit affording a passage for the insertion of the article within the aperture by bringing said article to a point adjacent the outer end of said slit and pressing the same inwardly towards the axis of said aperture while wiping said article along the edge of said body whereby said arm portions will be flexed out of their normal plane to widen the gap provided by said slit to an extent such that the article may be received within said aperture, the resilience of the rubber being sufficient to firmly grip against displacement an article disposed within said aperture, the aperture through said body being eccentrically disposed with reference to the outer edges of said body, the maximum width of said body, between its aperture and outer edge, being substantially diametrically opposite said slit, a support formed with a recess of a height substantially equal to that of said body, that portion of the disk which presents maximum width being disposed within said recess, and means for securing such portion of the body within said recess with the aperture and arm portions of the body disposed beyond said support.

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