

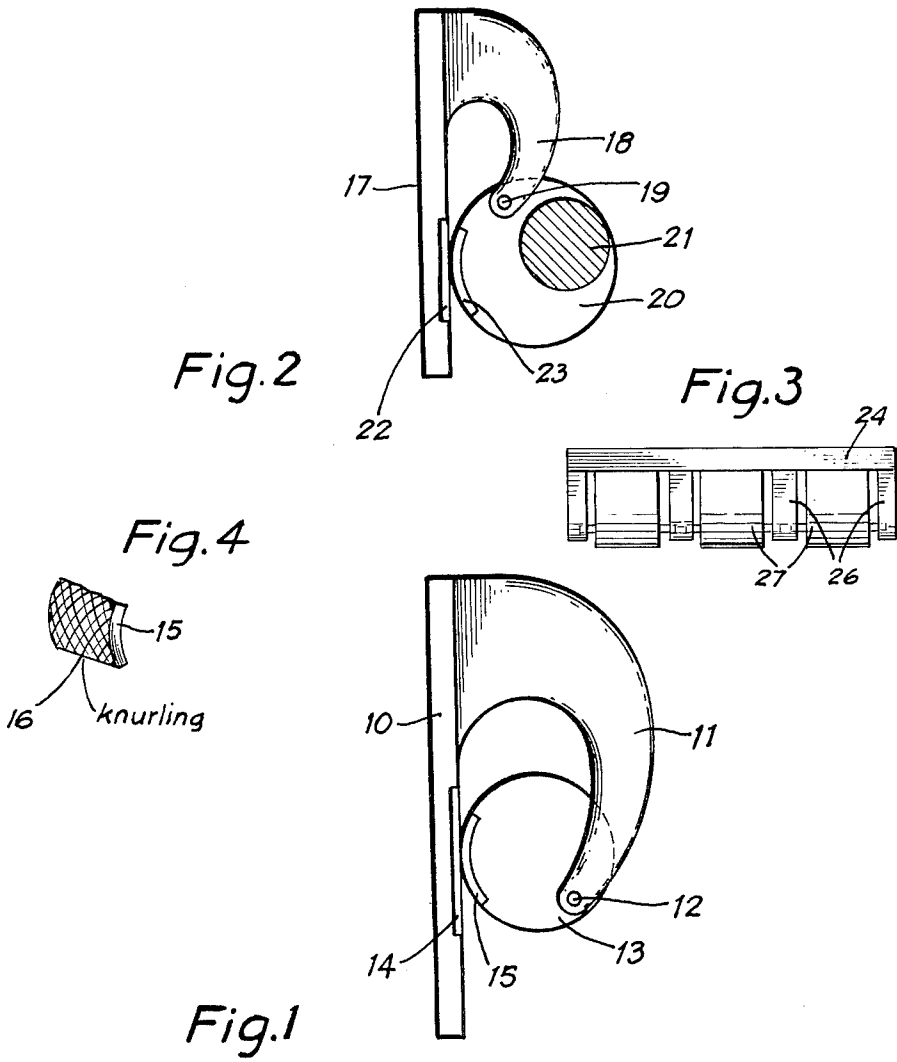
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HOLDER OF PLASTIC FOR ALL KINDS OF CLOTHS AND TOILET ARTICLES

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HOLDER OF PLASTIC FOR ALL KINDS OF CLOTHS AND TOILET ARTICLES

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This invention relates to a supporting device and, in particular, to a supporting device for cloth articles such as towels, neckties, body-linen, toilet articles and the like. Such devices can be employed in a number of places such as in the kitchen or the bathroom.

Hand towels and kitchen towels and the like are many times provided with small loops or ears for hanging them on hooks. It is costly and time consuming, however, to sew on such hooks or ears and they quite often get pulled out and this causes inconvenience in connection with the repair. Still further, cloth articles of the nature referred to have many different lengths while any supporting hook arrangement stationarily positioned for receiving such cloth articles are practically located for articles only of a predetermined length. Accordingly, many of the articles cannot be hung on the hooks but must be laid down somewhere which involves inconvenience and takes up considerable space.

For many articles, such as toilet articles, hooks cannot be used at all and heretofore there has been no practical inexpensive arrangement for hanging up articles of this nature.

With the foregoing in mind, a primary objective of the present invention is the provision of a simple inexpensive device for supporting the clamping articles of the nature referred to, which will be universal in application.

Still another object of this invention is the provision of a supporting arrangement for cloth articles and the like which does not require that the articles be provided with ears or loops formed therein or sewed thereon for the device to effect supporting engagement with the article.

Still another object of this invention is the provision of the supporting device for cloth articles and the like which is free of springs and the like so that it can be simply constructed and so that it will remain in operative condition for a long time.

Still another objective of this invention is the provision of the supporting device of the nature referred to for cloth articles and the like which can be made in large or small sizes for supporting either single or multiple articles as may be desired, all without introducing any complexities into the manufacturing of the device.

The foregoing objects of the present invention are accomplished by providing a base plate adapted for being stationarily mounted as on a wall or on the side of a cabinet or in some other suitable stationary location, and which base plate has arms extending therefrom and between which arms is pivotally supported a roller means that is operable for clamping the article to be supported against the base plate.

In one form of the invention, the roller means is weighted by a suitable counter weight means so that it is urged toward the base plate whereby the introduction of an article between the roller means of the base plate will result in the supporting clamping of the article.

Another modification, the point of pivotal connection of the arms of the roller is such that the weight of the roller itself biases the roller toward the base plate whereby it is operable for clampingly engaging cloth articles and the like against the base plate.

The present invention contemplates the use of a single arm, which might be disposed between two adjacent parts

of a single roller, or a pair of arms that embrace a roller therebetween, and is still further contemplated to use a plurality of rollers independently pivotally supported by a suitable arrangement of arm means projecting from the base plate.

The present invention still further contemplates a provision of knurling grooves or ridges or the like on the inner engaging portions of the roller and the base plate to assist these elements in their supporting function.

It has been found that the device can readily be formed by molding of thermo-plastic resin which results in extremely inexpensive manufacture while the metal inserts can be employed in the base plate and the roller at points of wear thereof or for effecting the desired urging of the roller toward the base plate.

The nature of the present invention will be more clearly understood upon reference to the following specification taken in connection with the accompanying drawings wherein:

FIGURE 1 is a side elevational view of one form of the invention wherein the roller is pivoted so that its own weight biases it toward the back plate;

FIGURE 2 is a view similar to FIGURE 1 which shows an arrangement wherein the roller is provided with a counterweight for biasing it toward the back plate;

FIGURE 3 is a schematic plan view showing how a plurality of rollers can be provided by single base plate; and

FIGURE 4 is a fragmentary perspective view showing how the surface of the roller or base plate or both can be somewhat roughened to improve the holding characteristics thereof.

Referring to the drawings somewhat more in detail, as will be seen in FIGURE 1 the device according to the present invention comprises a base plate 10 adapted for being secured to a wall or the side of a cabinet or the like as by screws or bolts passing through the base plate, which base plate has one or more support arms 11 extending outwardly therefrom. The arm means 11 rotatably receive pivot axis 12 which may be in the form of a rod or axle either with or extending through the roller element 13. As will be seen in FIGURE 1, the roller element is so arranged with the center of gravity thereof lying between the base plate and the arm means 11 that thrust of its own weight, as indicated by the arrow marked W, urges it toward base plate 10.

Base plate 10 may have inset therein a wear plate 14, metal, for example, and roller 13 may likewise have inset therein a wear plate 15 for cooperation with wear plate 14. Wear plate 15 may also comprise additional weight means for urging the roller toward clamping position. One or both of wear plates 14-15 may be narrowed or roughened or ridged, as generally indicated at 16 in FIGURE 4, which shows a fragment of wear plate 15 pertaining to roller 13.

In FIGURE 2 the base plate is indicated at 17 and comprises an arm or arms 18 projecting therefrom having means for receiving a rod or axle 19 pertaining to roller 20, which, in this modification, is provided with a weight 21 for urging the roller toward base plate 17. As before the roller and base plate may be provided with the wear plate means at 22 and 23, respectively, to make the device long wearing. These plates may be narrowed or roughened, as disclosed in FIGURE 4.

FIGURE 3 shows an arrangement wherein the base plate 24 is provided with projecting arms 26 to which arms are pivotally connected a plurality of rollers 27 which may be independently movable so that the plurality of articles can be supported by the device and be removable independently of each other.

The rollers or roller means have been shown as circular, although it will be understood that these can be other configurations, for example, elliptical, if so desired;

and that the rollers can be bypassed toward their operative holding positions either by imbedded or attached weights or by their own weight.

It will also be evident that a single roller can be suspended between two spaced arms, or a single projecting arm could engage a double roller between the two sides thereof so that only one arm is required to support each roller. With the last mentioned arrangement the two rollers could also be movable independently of each other while being supported by a single arm, thus making up a dual supporting arrangement, according to the present invention, for two articles but utilizing only a single arm on the base plate.

It will also be evident that the device of the present invention, while being particularly useful for supporting cloth articles, it is also quite useful for suspending papers and drawings or photographic prints or the like, and that the device will also be quite convenient for hanging up wet clothes for drying.

In the operation of the embodiment of FIGURE 1, the insertion of the article will cause it to be grasped and can be released merely by lifting roller 13; whereas, in the modification of FIGURE 2 the roller is lifted to permit the article to be inserted between it and the base plate, and the article can thereafter be removed merely by pulling downwardly on the article which will dislodge it from the device.

It will be understood that this invention is susceptible to modification in order to adapt it to different usages and conditions and, accordingly, it is desired to comprehend such modifications within this invention as may fall within the scope of the appended claims.

I claim:

1. A supporting device comprising; a base plate adapted for mounting on a vertical surface and having a vertical outer face, a supporting arm having one end fixed to said outer face and extending outwardly and downwardly therefrom and having a second end in spaced relation to said base plate, at least one roller means pivotally and eccentrically mounted on said second end on

a horizontal axis which is parallel to said outer face and having an arcuate surface parallel to said outer face which engages the said outer face of said base plate solely by gravity due to the eccentric mounting of said roller means, the axis of pivotal connection of said roller to said second end of said arm being located on the roller on a diameter thereof at such a point therealong that the greatest length of the diameter on one side of said point is greater than the distance from said axis to said outer face.

2. The device as claimed in claim 1 in which said roller means has a center of gravity which is located on the opposite side of said axis from said outer surface.

3. The device as claimed in claim 1 in which said roller means has a center of gravity which is located between said axis and said outer face.

4. The device as claimed in claim 1 further comprising; a first wear plate set in to said outer surface of said base plate, and a second wear plate set in said arcuate surface of said roller for cooperative engagement with said first wear plate.

5. The device as claimed in claim 1 in which said roller means has an axial portion on each side of said arm.

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