July 26, 1949. J. W. STEVENS 2,477,271

RACK

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Fig. 2.

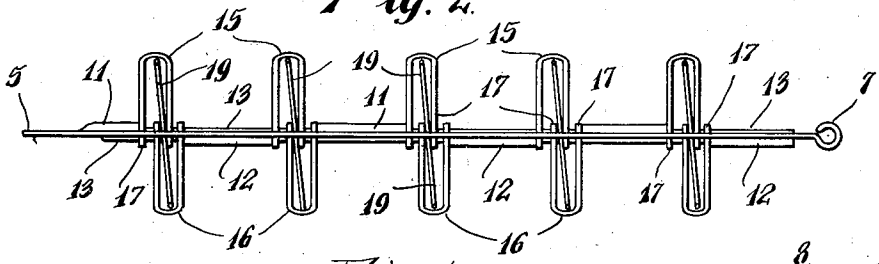


Fig. 1.

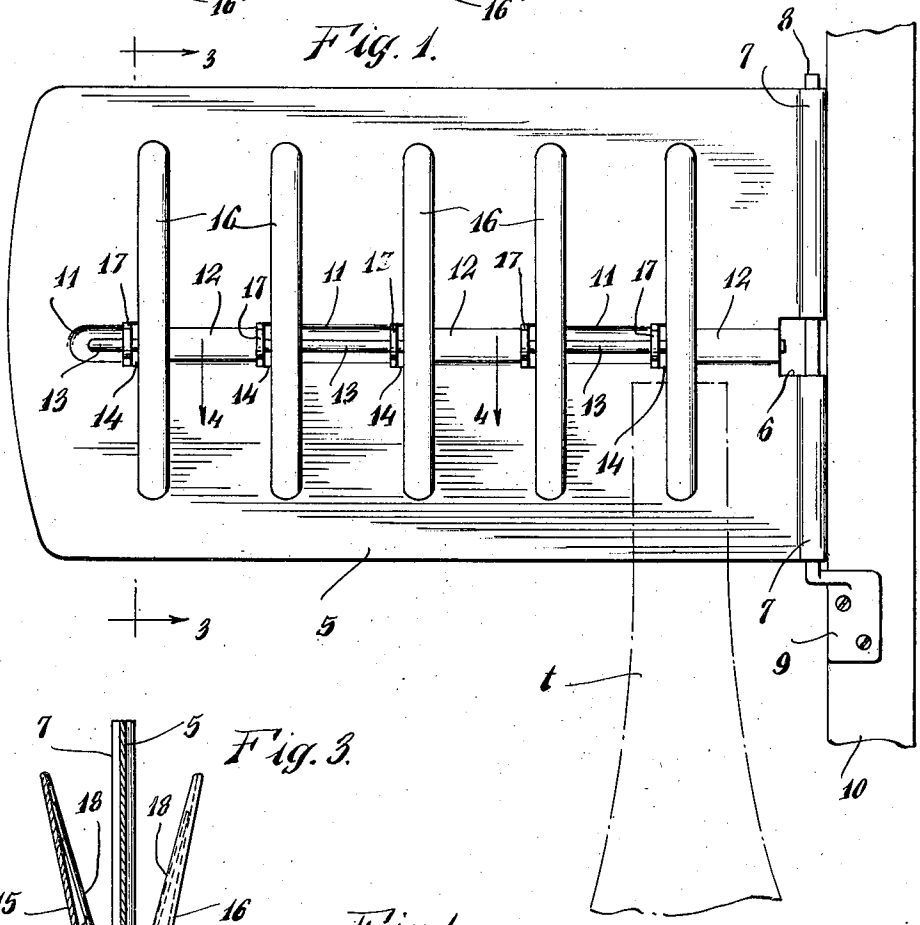


Fig. 3.

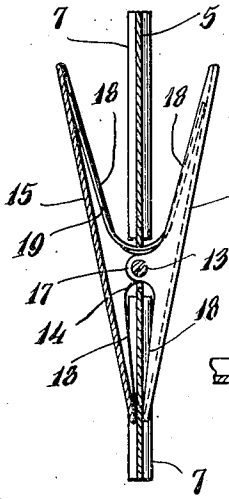
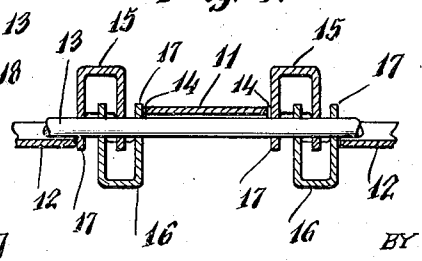


Fig. 4.



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RACK

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8 Claims. (Cl. 211—89)

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This invention relates to a rack for detachably supporting articles of clothing, such as neckties, and it is an object of the invention to increase the capacity of the rack without increasing the size thereof.

It is another object of the invention to pivotally support a series of clamping members on both sides or faces of a supporting plate by a single pintle or rod.

It is a further object of the invention to adapt the supporting plate to be pivotally mounted upon a suitable bracket whereby the plate is adjusted to desired positions.

Another object of the invention is to mount the clamping members in opposed pairs on the pintle or rod and yieldingly urge corresponding ends of said pair of members into clamping engagement with the opposite faces of the supporting plate by a single spring.

A further object of the invention is to provide clamping members of channel shape in cross section with the side walls of the channel tapering from an intermediate portion to the opposite ends to provide spaced and elongated gripping or clamping portions.

Other objects and advantages of the invention will hereinafter appear.

In the drawing accompanying and forming a part of this application,

Figure 1 is an elevational view of the rack forming the embodiment of the invention pivotally mounted upon a bracket.

Figure 2 is a plan view of the rack looking at the top of Figure 1.

Figure 3 is a sectional view taken on the line 3—3 of Figure 1 looking in the direction of the arrows.

Figure 4 is a sectional view, on an enlarged scale, taken on the line 4—4 of Figure 1 looking in the direction of the arrows.

The embodiment of the invention as illustrated in the accompanying drawing comprises a rectangular plate 5 having one end edge of curved form to enhance the appearance thereof and the opposite end arranged with an inwardly extending recess or cut-out portion 6 intermediate the longitudinal edges of the plate, as shown in Figure 1. The material of the plate on the opposite sides of the recess 6 is rolled inwardly from said end to form knuckles 7 for the pivotal engagement of a pivot shown as a pintle 8 fixed at one end to a bracket 9 adapted to be mounted on a suitable supporting surface 10, such as a wall or door, with the pintle extending in parallel spaced relation with said surface, as shown in

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Figure 1, so that the plate is adjustable to extend parallelly of or at an angle to the supporting surface.

Longitudinally of the plate in horizontal alinement with the recess 6, there is provided a series of equidistantly spaced offset portions 11 and 12, the portions 11 being offset from one face of the plate alternately with the portions 12 offset from the opposite face of the plate to support a spindle or rod 13 longitudinally of the plate with one end terminating in the end offset portion 11 and the other end of the rod terminating at the recess 6. The offset portions 11 and 12 are of curved or arcuate form in cross section to facilitate engagement of the rod into said portions from recess 6. The plate 5 is also arranged with a series of openings 14 in the spaces between the adjacent ends of the offset portions 11 and 12, to expose spaced portions of the rod 13 for a purpose to be hereinafter described.

The articles to be supported, such as a necktie *t*, are detachably clamped to both faces of the plate 5 by two rows of clamping members 15 and 16, each member being of channel shape in cross section having ear portions 17 extending from the walls of the channel intermediate the ends of said member and shown as being nearer one end with the side walls of the channel tapering in height from said ear portions to the opposite ends of the member, as shown at 18 in Figure 3. The ear portions 17 are provided with alined openings to pivotally mount the clamping members on the exposed portions of the rod 13 extending across the openings 14 with the ear portions extending through said openings. The members 15 and 16 are mounted on the rod in opposed pairs with one ear portion 17 of each member interposed between the ears of the other opposed member, as shown in Figures 2 and 4.

In assembling the members 15 and 16 on the plate 5, the members 15 and 16 are first positioned in the openings 14, then the rod 13 is pushed from the recess 6 along the end offset portion 12 into and through the openings in the ears 17 of the members 15 and 16 adjacent to said offset portion 12, then along the offset portion 11 into and through the openings in the ears 17 of the members 15 and 16 succeeding said offset portion 11, and this engagement of the rod with the succeeding offset portions 11 and 12 and the openings in the ears 17 of the members 15 and 16 is repeated until the forward end of the rod abuts the juncture between the end offset portion 11 and the plate 5.

The end portions of the clamping members 15

and 16 extending the shortest distance from the ear portions 17 are yieldingly urged to engage the tapering channel walls of said members with the opposed faces of the plate 5 by a straight spring 19 formed to U shape by extending the center portion of the spring through an opening 14 and engaging the opposite end portions in the channels of the longer end portions of the members 15 and 16, as shown in Figures 2 and 3. The tapering of the side walls of the channel of the members 15 and 16 increases the amount of surface of said side walls engaging the opposite faces of the plate, as shown in Figure 3, and assures the clamping of a necktie between said members and the plate. The channel walls of the members 15 and 16 also provide said members with spaced gripping or clamping surfaces which also assure a more positive clamping of articles to the plate 5.

A necktie is clamped between a member 15 or 16 and the plate 5 by depressing the longer end portion of said member against the force of the spring 19, engaging a folded portion of the necktie on the plate in line with the shorter end portion of the member 15 or 16 which is spaced from the plate, and releasing the longer end portion of said member which permits the shorter end portion to engage and clamp the necktie under the force of the spring 19 against the plate.

The necktie is removed from the plate 5 and clamping member 15 or 16 by depressing the longer end portion of said clamping member, or by pulling the necktie from between the plate and the clamping member.

Having thus described my invention, I claim:

1. In a rack, a plate having equidistantly spaced portions offset alternately from the opposite faces of the plate and openings in the plate between the offset portions, a rod engaged in the offset portions and extending transversely of the openings, pairs of clamping members pivotally mounted on the portions of the rod extending transversely of the openings in the plate and the members of each pair of members juxtaposed to the opposite faces of the plate, and a spring carried by each pair of clamping members to urge one end of the clamping members into clamping engagement with the juxtaposed face of the plate.

2. A rack as claimed in claim 1, wherein one end of the plate is arranged with knuckles to adapt said plate to be pivotally mounted.

3. A rack as claimed in claim 1, wherein each clamping member is arranged with a pair of spaced ears extending into an opening in the plate and pivotally engaged on the rod.

4. A rack as claimed in claim 1, wherein each clamping member is arranged with a pair of spaced ears extending into an opening in the plate and pivotally engaged on the rod with one ear of a clamping member of a pair of clamping members interposed between the ears of the other clamping member of said pair of clamping members.

5. A rack as claimed in claim 1, wherein the offset portions are extended from the plate equidistances and are substantially of arcuate shape in cross section.

6. In a rack, a plate having equidistantly spaced openings, a rod mounted on the plate to extend transversely of the openings, and pairs of clamping members pivotally mounted on the portions of the rod extending transversely of the openings and the members of each pair of clamping members juxtaposed to the opposite faces of the plate and a spring extending through each opening and engaging a pair of clamping members to urge a corresponding end of said members into clamping engagement with the plate.

7. In a rack, a plate having equidistantly spaced openings, a rod mounted on the plate to extend transversely of the openings, clamping members of channel shape in cross section and having ears extending from the side walls of the channel intermediate the ends of said members and pivotally mounted on the portions of the rod extending transversely of the openings, the clamping members being arranged in pairs and the members of each pair juxtaposed to the opposite faces of the plate, and a spring having an intermediate portion extending through the opening in the plate and the opposite end portions engaged with a portion of each member of a pair of clamping members on one side of the rod to yieldingly urge the ends of the clamping members on the opposite side of the rod into clamping engagement with the plate.

8. A rack as claimed in claim 7, wherein the side walls of the channel of the clamping members taper from the ears to the ends engaging the plate to increase the area of the clamping members engaging the plate.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
724,427	Bonsall	Apr. 7, 1903
1,089,916	Fisher	Mar. 10, 1914
1,281,913	Curley	Oct. 15, 1918
1,557,989	Dombrowsky	Oct. 20, 1925