April 30, 1968 S. E. KLAUSEN ET AL 3,380,595

DRYING RACK

Filed March 18, 1966 2 Sheets-Sheet 1

Fig. 1

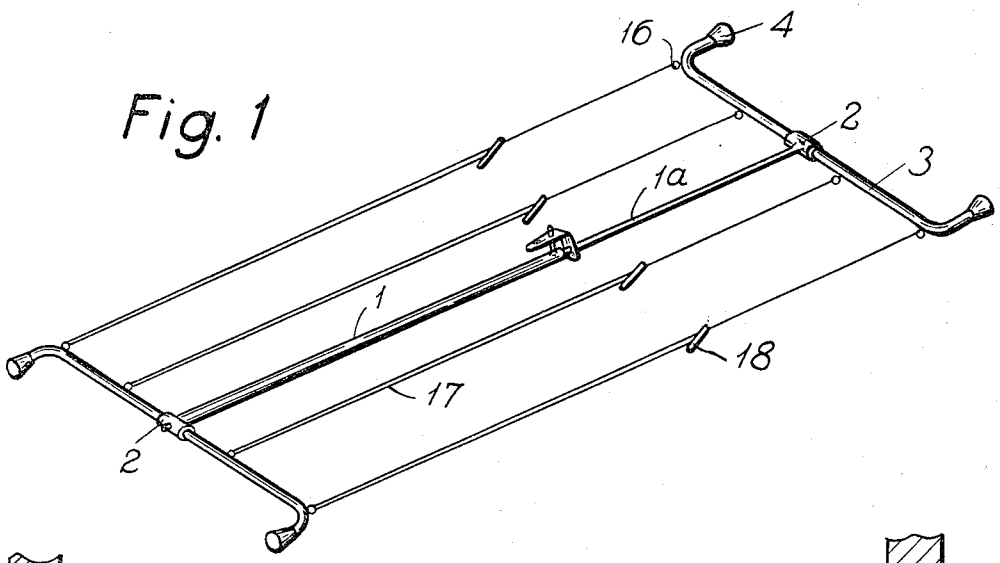


Fig. 2

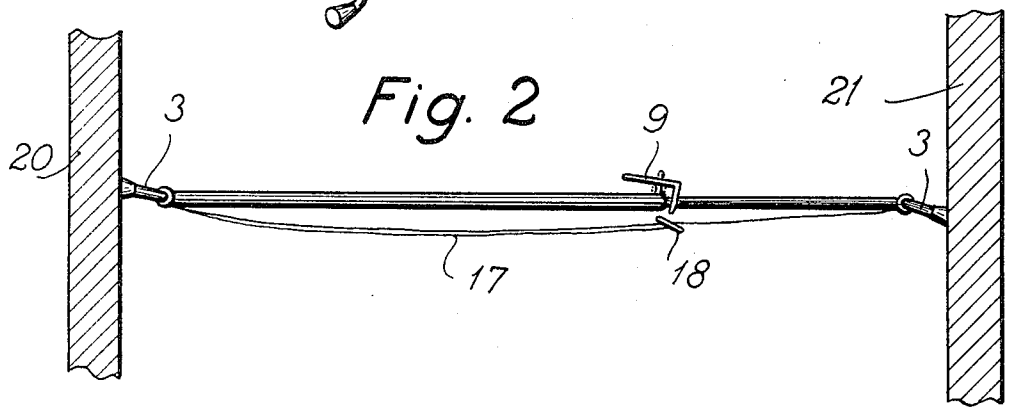
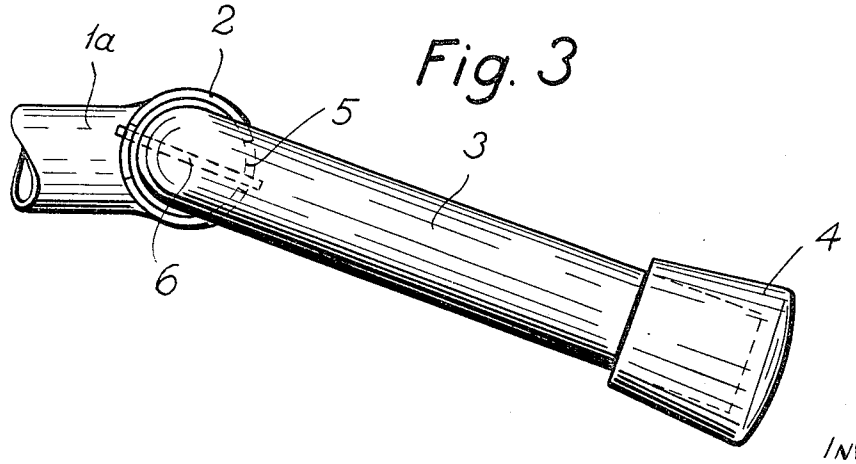


Fig. 3



INVENTORS
SVEND E. KLAUSEN
CARL A. JACOBSEN
Julian Caplan
ATTORNEY

April 30, 1968 S. E. KLAUSEN ET AL 3,380,595

DRYING RACK

Filed March 18, 1966 2 Sheets-Sheet 2

Fig. 4

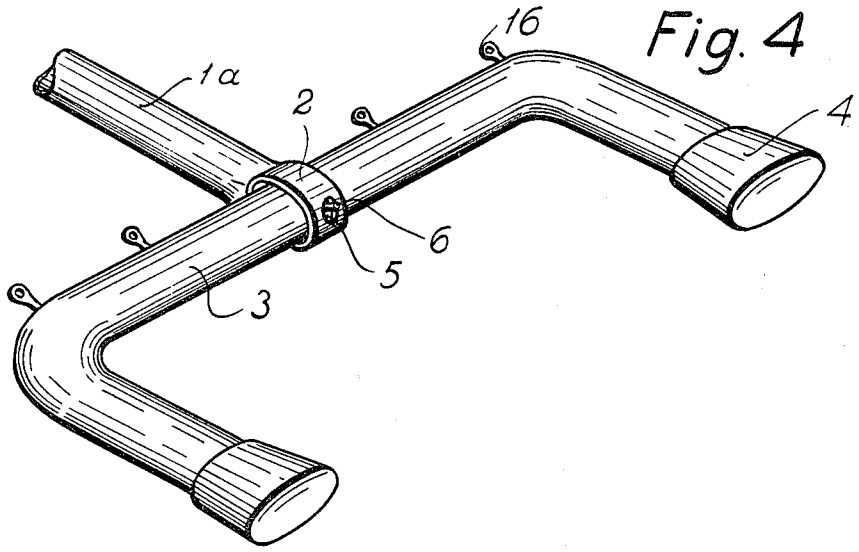


Fig. 5

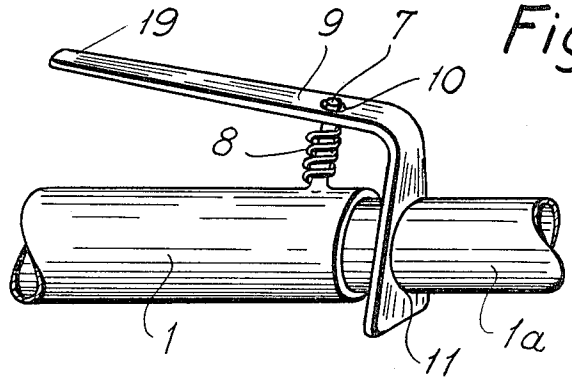


Fig. 6

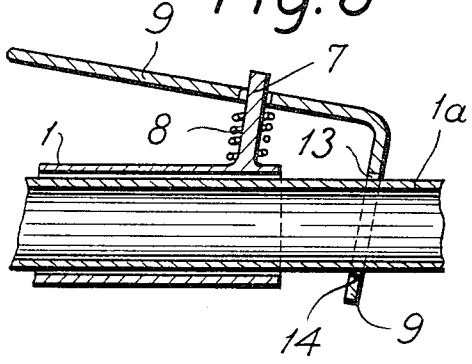
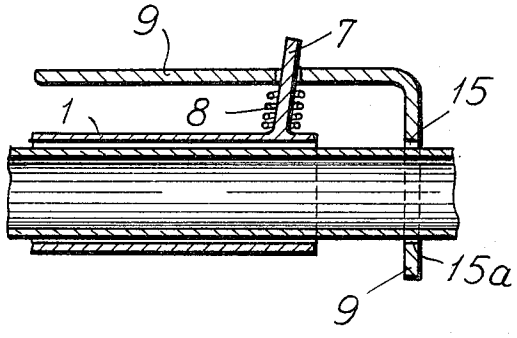


Fig. 7



INVENTORS
SVEND E. KLAUSEN
CARL A. JACOBSEN
Julian Caplan
ATTORNEY

United States Patent Office 3,380,595
Patented Apr. 30, 1968

3,380,595

DRYING RACK

Svend E. Klausen, Spidslodden 15, and Carl A. Jacobsen, Spidslodden 13, both of Kastrup, Copenhagen, Denmark

Filed Mar. 18, 1966, Ser. No. 535,490
Claims priority, application Denmark, Mar. 23, 1965, 1,478/65
4 Claims. (Cl. 211—87)

ABSTRACT OF THE DISCLOSURE

The invention relates to a longitudinally adjustable drying rack provided with swingable bows at either end and adapted to expand so that it may be mounted between two parallel or substantially parallel walls without the use of nails, screws, bolts or similar conventional attachment means.

It is the object of the invention to relieve the drawbacks involved by the use of drying racks having the aforesaid attachment means by providing a drying rack that can be readily used wherever desired, for example in bathrooms, above tubs, on balconies, in kitchens, rooms and foyers, and be readily removed without leaving any trace.

This is accomplished by the drying rack according to the invention which consists of a telescope tube with a locking mechanism which, without being manually operated, permits the telescope tube to be extended and locked in the desired length. The said telescope tube is at either end provided with a transverse sleeve for receiving a U-shaped bow of smaller diameter than the sleeve, so that the bow may turn, tilt and rock in the sleeve in relation to the longitudinal axis of the telescope tube. The U-shaped bow may furthermore at its central part be provided with a fixed pin which may travel in a hole provided in the sleeve in order to limit the movements of the U-shaped bow.

The drying rack according to the invention will now be further described with reference to the drawing, in which:

FIGURE 1 is a perspective view of the drying rack,

FIGURE 2 is a sideview of the rack mounted between two walls.

FIGURE 3 is a sideview of a sleeve with the U-shaped bow.

FIGURE 4 is a perspective view of the U-shaped bow.

FIGURE 5 is a perspective view of the locking mechanism of the telescope tube.

FIGURE 6 is a section through the longitudinal axis of the telescope tube, showing the locking mechanism in such position that the inner portion of the telescope tube cannot be displaced into the outer portion of the said tube.

FIGURE 7 shows a corresponding section as FIGURE 6, with the locking mechanism in a position permitting the inner portion of the telescope tube to be displaced in its outer position.

The drying rack according to the invention consists of a telescope tube 1 and 1*a* provided at its ends with a sleeve 2 having a bore 5. In the sleeve 2 is mounted a U-shaped bow 3 of a diameter so much smaller than that of the sleeve so as to permit the bow 3 to turn, tilt and rock in the sleeve. The ends of the U-shaped bow 3 are provided with ferrules 4 of rubber or similar material, partly to increase the friction between the walls and the rack and partly to protect the walls. The bow 3 has eyes 16 for receiving clothes lines or wires 17 which are provided with wire strainers 18. At the central part of the U-shaped bow 3 is mounted a pin 6 which travels in the bore 5 of the sleeve 2 so as to limit the movements of the U-shaped bow 3, but allowing it to turn within an angle

of about 25°, of which 5° are on one side of the longitudinal axis of the telescope tube 1 and 1*a* so that it can only be displaced very few millimetres in the longitudinal direction of the sleeve 2.

On the telescope tube portion 1 is mounted a pin 7 surrounded by a coil spring 8. In connection with the pin 7 is arranged an angular rocker arm 9 which is provided with a bore 10 for receiving the pin 7 and a larger bore 11 for receiving the telescope tube portion 1*a*. The rocker arm 9 is acted upon by the spring 8 so that the sharp edges 13 and 14 of the bore 11 are resting in contact with the upper and the lower edge of the telescope tube portion 1*a*. When the telescope tube portion 1*a* is drawn out, the friction between the telescope tube portion 1*a* and the edges 13 and 14 will cause the rocker arm 9, overcoming the action of the spring 8, to turn so that the surfaces 15 and 15*a* of the bore will be substantially parallel with the tube portion 1*a*, whereby the tube may be drawn out without difficulty. When the outward movement of the inner tube 1*a* is stopped, the spring 8 will tilt the rocker arm 9 back into its starting position, whereafter the sharp edges 13 and 14 will again rest in contact with the upper- and underside of the telescope tube portion 1*a*, thereby locking the tube in its position, since movement of the telescope tube portion 1*a* in inward direction will cause the edges 13 and 14 to increase their grip around the tube portion 1*a* owing to the heavy friction. If the rocker arm 9 is manually operated by means of the finger grip 19, overcoming the resistance of the spring 8, the surfaces 15 and 15*a* of the bore will move into a position parallel with the telescope tube portion 1*a*, thus permitting the said portion to be telescoped into the portion 1 without appreciable friction. When the rack is mounted, the length of the wires 17 is increased by means of the wire strainers 18 to a length equal to or greater than the distance between the walls used for mounting the rack. The rack is kept in horizontal position at the desired level. Owing to gravity the ends of the U-shaped bows 3 will be pointing downwards at an angle of about 20° in relation to the longitudinal axis of the telescope tube. The ferrule 4 of one U-shaped bow 3 is brought to rest against the wall. The telescope tube 1 and 1*a* is then drawn out until the ferrule of the other bow 3 is brought to rest in contact with the opposite wall. A downward pressure exerted close to or on one of the bows will cause the bow 3 to turn in its sleeve 2 into a position about 5° above the longitudinal axis of the telescope tube. This will increase the length of the drying rack, whereby it is pressed firmly into position between the two walls. Since the bow 3 is now supported by the wall at points slightly above the longitudinal axis of the telescope tube 1 and 1*a*, the bow 3 will remain in its position. The length of the wires is then adequately reduced by means of the wire strainers 18, and the drying rack is ready for use.

If the rack is subjected to a heavy weight, the other U-shaped bow 3 will be turned in similar manner and further increase the length of the rack so that it can by no means fall down while in operation.

The rack is removed from the walls by being raised, whereby the bow 3 or the bows 3 are turned downwards, thus releasing the rack. The telescope tube portions 1 and 1*a* may then be telescoped into each other so that the rack occupies a minimum of space.

If the walls are not wholly parallel, the drying rack may be used nevertheless, since the clearance between bows 3 and sleeves 2 permits the bows 3 to be turned a certain amount transversely of the longitudinal axis of the telescope tube portions 1 and 1*a*.

In a modified embodiment of the drying rack according to the invention the sleeve 2 may be substituted by other attachment means permitting turning, tilting and

rocking of the U-shaped bow 3. The said U-shaped bow 3 may also be substituted by a bow of a different form.

In another embodiment of the drying rack according to the invention the U-shaped bow is in fixed connection with the telescope tube, one or both portions of the telescope tube being near its ends provided with a snap lock mechanism serving to expand the drying rack in similar manner as the U-shaped bow and sleeve described above.

What is claimed is:

1. A drying rack comprising a telescopic, longitudinally adjustable tube having a first and a second tubular member, manual latch means for securing said tube in a position of desired length, a pair of yoke-shaped members each having a central portion and two legs, means at opposite ends of said tube each receiving a central portion of one said yoke-shaped members for pivotal movement of said yoke-shaped members about an axis transverse to the axis of said tube and a plurality of lines each attached at one end to the central portion of one said yoke-shaped member and at the opposite end to the central portion of the other said yoke-shaped member.

2. A rack according to claim 1, in which said means includes a transverse sleeve, said sleeve formed with a slot and in which said yoke-shaped members includes a pin through said sleeve and projecting from said slot,

whereby said yoke-shaped members may pivot relative to said tube through a limited amplitude.

3. A rack according to claim 1, which further comprises friction-creating ferrules on the ends of said yoke-shaped members.

4. A rack according to claim 1, in which said latch means comprises an angular rocker arm formed with a first aperture in one leg and a second aperture in the other leg, a pin on one said first tubular member extending through said first aperture, a spring around said pin and engaging said one leg, said second member fitting through said second aperture, said spring biasing said rocker arm to engage the margins of said second aperture to restrain movement of said members relative to each other.

References Cited

UNITED STATES PATENTS

1,879,865	9/1932	Wright	287—58
2,616,569	11/1952	Akers	211—104 XR
2,780,365	2/1957	Trainor	211—119.1 XR
2,868,388	1/1959	Crites	211—119.1
2,923,564	2/1960	Brown	287—58

ROY D. FRAZIER, *Primary Examiner.*

W. D. LOULAN, *Assistant Examiner.*