Feb. 26, 1952 R. W. CASHEN, JR 2,587,111

TELESCOPIC HANGER

Filed June 7, 1949

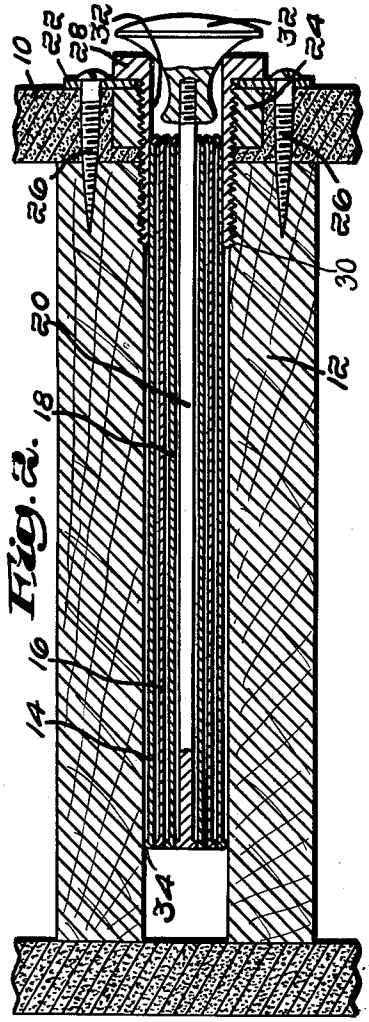

Fig. 2.

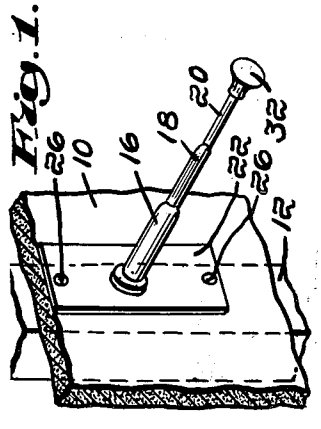

Fig. 1.

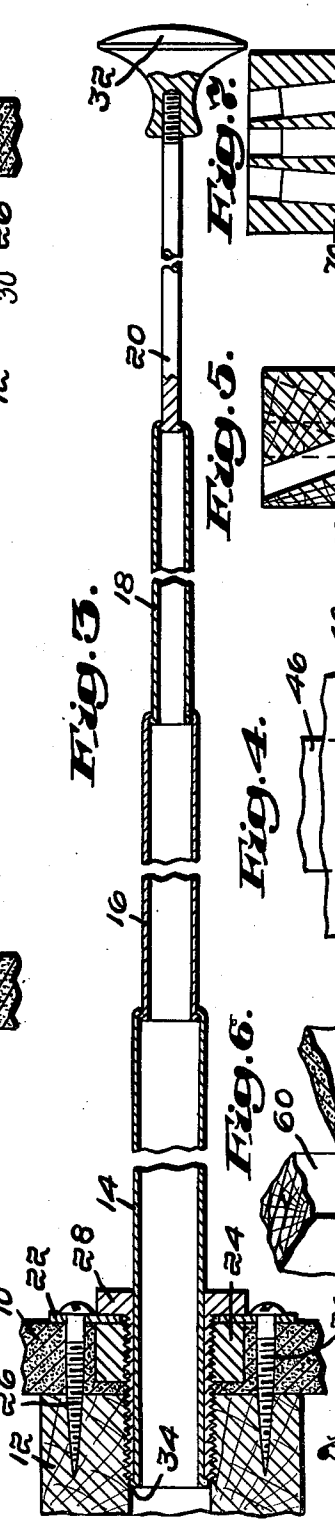

Fig. 3.

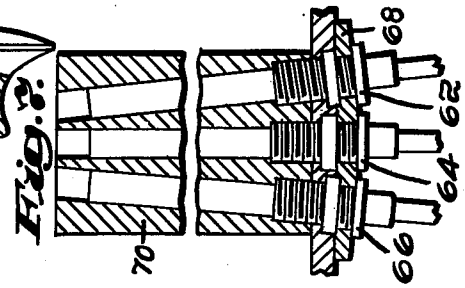

Fig. 7.

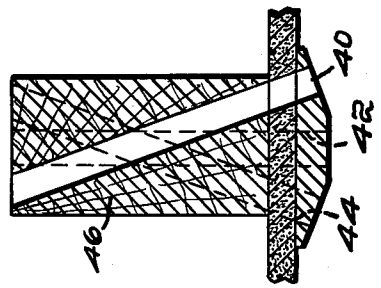

Fig. 5.

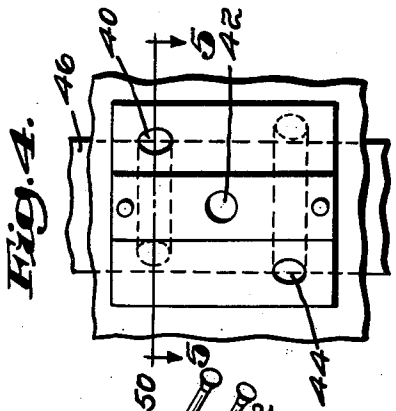

Fig. 4.

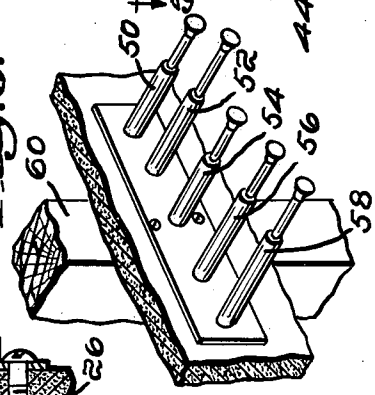

Fig. 6.

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Patented Feb. 26, 1952 2,587,111

UNITED STATES PATENT OFFICE

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TELESCOPIC HANGER

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Application June 7, 1949, Serial No. 97,505

2 Claims. (Cl. 211—123)

1

This invention relates to an improved hanger which can be attached or anchored to a wall or other supporting body to form a convenient projecting member for receiving towels, clothing and other articles in bathrooms, kitchens, closets and various other localities.

It is a general object of the invention to provide an improved wall hanger which can be mounted in a wall in a collapsed position so that it presents little if any projecting part when not in use, but which can when desired be drawn out from the wall to varying desired lengths and thus constitute a convenient arm or hanger for supporting articles.

It is also an object of the invention to provide a simple, cheap and efficient hanger which is suitable for use in various types of wall frameworks and which is especially designed to provide a relatively rugged, durable support when combined with a plaster-type wall.

These objectives I accomplish by employing a number of tubular sections, arranged in telescoping relation within one another, each section being limited to a length which may be contained in the space included in a conventional wall framework where spaced-apart wall studs are covered on two opposite sides with a wall surfacing material such as plaster. Since the conventional thickness of conventional wall frameworks is usually of an appreciable dimension such as is represented by the width of the studding, ranging from 3 to 4 inches, I find that I may make use of several sections, each of which has a length roughly corresponding to the wall thickness, and the combined length of these several sections will then furnish a satisfactory hanger length.

These and other novel features of the invention will be more fully understood and appreciated from the following description of preferred embodiments of the invention selected for purposes of illustration and shown in the accompanying drawings, in which

Fig. 1 is a fragmentary perspective view illustrating the hanger of the invention in a partly extended position and supported in a supporting wall body;

Fig. 2 is a fragmentary plan cross section of a wall framework made up of plaster-type materials secured at either side of a vertical studding member with which the hanger is associated;

Fig. 3 is a vertical cross-sectional view of the hanger member in a fully extended position with one of the sections being supported in a wall section, fragmentarily indicated at the left-hand side of the figure;

Fig. 4 is a detail elevational view of a modified hanger arrangement; and

Fig. 5 is another fragmentary plan cross section further illustrating the arrangement shown in Fig. 4;

2

Fig. 6 is a fragmentary perspective view of another modified form of the invention; and

Fig. 7 is a detail plan cross-sectional view of a plurality of hanger elements arranged in a radially disposed manner.

In the structure shown in the drawings, the hanger of the invention has been illustrated in association with a section of a typical plaster-type wall framework. This framework is made up of an interior wall material 10 such as plaster, sheetrock, or other similar material, fastened in any suitable manner to the vertical spaced-apart uprights of which stud 12 is representative.

As noted in Fig. 2, the hanger includes a plurality of tubular sections 14, 16, 18 and 20, which are slidable one within another in the manner indicated to constitute a telescopic arrangement which in a fully closed position, as shown in Fig. 2, can be completely contained in the wall framework, with the tubular sections lying in nested relation within one another. It is pointed out that by employing a number of sections whose length is chosen less than the combined width of the stud 12 and the thickness of the plaster body 10, it is readily possible to furnish a hanger of convenient length such as for example 10 or 12 inches, and yet maintain a nested relationship which will permit the collapsed hanger to be contained almost entirely within the wall framework in a position in which little if any projection is offered when the hanger is not in use.

As illustrative of one suitable means for securing the telescopic hanger in the partition, I have provided a wall plate 22 which preferably is formed with a tubular extension 24, having its inner periphery formed with threaded portions. This tubular extension 24 is adapted to fit into an opening of the same size as the extension cut into the plaster material 10. The plate is secured in place by means of screws 26 which pass through the plaster 10 as shown in Fig. 2.

A bushing 28 is formed with a reduced threaded end 30 which is adapted to be threaded into the extension 24, thus clamping the bushing tightly against the wall plate 22. At its inner extremity the threaded end of the bushing projects beyond the plaster to engage in the stud 12 as shown in Fig. 2 and in this way there is provided a solid anchoring for the inner end of the bushing member, thus avoiding overloading the relatively brittle plaster section 10. The length of the bushing member which projects into the stud 12 may be varied to furnish increasing support for relatively longer bracket sections.

The bushing has a bore which is chosen to provide for receiving therethrough slidably the larger or outer tubular section 14 as indicated, and when in a fully advanced position the tubular member 14 extends transversely through the studding 12 so that it is almost entirely con-

tained therewithin, and as the remaining tubular sections 16, 18 and 20 are forced into one another, the entire unit is contained in the wall section with only the handle member 32 projecting from the bushing 28 in the manner shown. Fig. 3 shows the several tubular sections in a fully extended operative position. In removing the sections it will be observed that the outer tubular section 14 is formed with a stop 34, which extends upwardly from the peripheral surface of the tubular member sufficiently to engage against the inner end of the bushing 28 without coming into contact with the end of the extension 24. This arrangement permits the several tubular sections to be removed from the wall plate when desired by unscrewing the bushing member and pulling out the tubular section 14. Replacement sections can then be installed or other changes made.

In some instances where the hanger is of relatively short length or is to support only a relatively light load, it may be secured through the plaster section of the wall at points intermediate the studs and where this is desired a device such as a toggle nut or other similar clamping device may be employed to anchor the bushing and sleeve against the plaster section.

In other instances it may be desired to employ multiple hanger units and to do this without losing the strong supporting effect derived from recessing the bushing in a stud section. Thus in Figs. 4 and 5, I have shown another arrangement by which a series of the telescopic hangers may be employed to provide a plurality of hanger arms arranged in close proximity to one another as may be example be desired where only a limited amount of space is available. In the figures noted, a series of the hangers with the same recessed bushing structure described are generally noted by numerals 40, 42 and 44 located one above another and in offset relation such that a radiating arrangement is achieved. By providing angular openings in which the bushings and hangers are received through the stud 46, as for example along two diagonal paths and a central path as shown in Fig. 5, the desirable solid supporting effect of the bushings in the stud is retained, and the several hanger elements when drawn out from the supporting wall constitute convenient projections occurring at different levels.

Where a large amount of space is available the use of a multiple hanger unit may be resorted to, for the purpose of forming an adjustable rack as has been suggested in Fig. 6, wherein a plurality of hangers 50, 52, 54, 53, 58 are arranged in a substantially parallel spaced relation to one another and in a horizontal plane to comprise a relatively wide rack body.

In addition I may provide a single wall plate for carrying the several hanger elements, and when this is done the plate may be secured at one point, preferably its center section, so that a proper anchoring through a stud 60 may be obtained. This anchoring lends rigidity and strength to the entire length of the plate and as a result it is more practical to secure the outer hangers through the plaster section without benefit of toggle bolts or similar fastening means.

A still more limited form of horizontal rack or shelf arrangement may also be comprised by locating a multiple hanger unit in a common stud as shown in Fig. 7. In this case it turns out that a limited number of telescopic hanger elements may all be recessed in a horizontally spaced apart

relation owing to the thickness of conventional studding commonly employed in dwelling houses. For example, three hangers are shown, and to facilitate such an arrangement I have provided for bushing and sleeve members 62, 64 and 66 which are angularly disposed with respect to one another and to the wall plate 68, with each bushing being supported in the stud 70 in a somewhat radiating manner.

Having thus disclosed my invention, what I claim as new and desire to secure by Letters Patent is:

1. In combination with a wall frame-work of the class which includes spaced-apart vertical studs and a layer of rigid covering material supported on the studs, a telescopic wall hanger comprising a wall plate having a tubular portion extending from one side thereof and projecting into the rigid covering material, a bushing removably secured in the tubular portion and presenting an outer flanged extremity, a plurality of hanger sections slidable one within another received in the bushing, stop means located on an inner end of the outer section in a position to engage with the inner edge of the bushing, and the inner end of the bushing extending into engagement with a vertical stud of the wall frame-work and cooperating with the said wall plate to distribute pressure exerted on the hanger along the outer surface of the rigid covering material.

2. In combination with a wall frame-work of the class which includes spaced-apart vertical studs and a layer of rigid covering material secured to the studs, a telescopic wal lhanger comprising a wall plate, having a tubular portion extending from one side thereof, a bushing removably secured in the tubular portion and presenting an outer flanged extremity, a plurality of hanger sections slidable one with another received in the bushing, stop means located on an inner end of the outer tubular section in a position to engage with the inner end of the bushing without contact with the tubular portion of the wall plate when the outer section is in a fully extended position, the inner end of the tubular portion of the wall plate extending part way through the rigid covering material to occur in recessed relation therewith and the inner end of the said bushing extending into threaded engagement with a vertical stud of the wall frame-work and cooperating with the tubular portion and outer wall plate section to distribute pressure on the outer surface of the rigid covering material.

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