# United States Patent

Larson

[15] 3,638,801

[45] *Feb. 1, 1972


## [54] ADJUSTABLE HANGER DEVICE


[72] Inventor: **Charles O. Larson**, Sterling, Ill.

[73] Assignee: **Chas. O. Larson Co.**, Sterling, Ill.



[ * ] Notice: The portion of the term of this patent subsequent to Oct. 20, 1987, has been disclaimed.

[22] Filed: **Apr. 2, 1969**

[21] Appl. No.: **812,644**

[52] **U.S. Cl.** ..... **211/57**, 211/59, 211/94.5, 211/162, 248/219, 248/DIG. 3, 312/50, 312/184

[51] **Int. Cl.** ..... **A47f 7/00**

[58] **Field of Search** ..... 211/54, 57, 16, 59, 125, 162, 211/6, 49 D, 94.5; 312/37, 50, 42, 321, 189, 60, 35, 184; 248/247–249, 219, 339, 239, DIG. 3; 221/312 A; 294/27 H, 27, 31.2; 16/115, 114 A



[56] **References Cited**

UNITED STATES PATENTS

| | | | |
|---|---|---|---|
| 3,070,339 | 12/1962 | Schayer | 248/DIG. 3 UX |
| 3,534,864 | 10/1970 | Larson | 211/59 X |
| D201,810 | 8/1965 | Castellano | 211/125 X |
| 1,939,027 | 12/1933 | Stewart | 248/219 X |
| 2,262,339 | 11/1941 | Shaffer | 16/114 A X |
| 2,578,233 | 12/1951 | Entsminger | 294/27 X |
| 3,162,312 | 12/1964 | Hobson | 248/DIG. 3 UX |
| 3,200,960 | 8/1965 | Banse | 211/182 X |
| 3,245,547 | 4/1966 | Felkay | 248/DIG. 3 UX |
| 3,483,995 | 12/1969 | Larson | 211/57 |

FOREIGN PATENTS OR APPLICATIONS

| | | | |
|---|---|---|---|
| 225,385 | 1/1963 | Austria | 248/DIG. 3 |
| 732,531 | 3/1943 | Germany | 211/59 |
| 986,764 | 3/1965 | Great Britain | 211/71 |



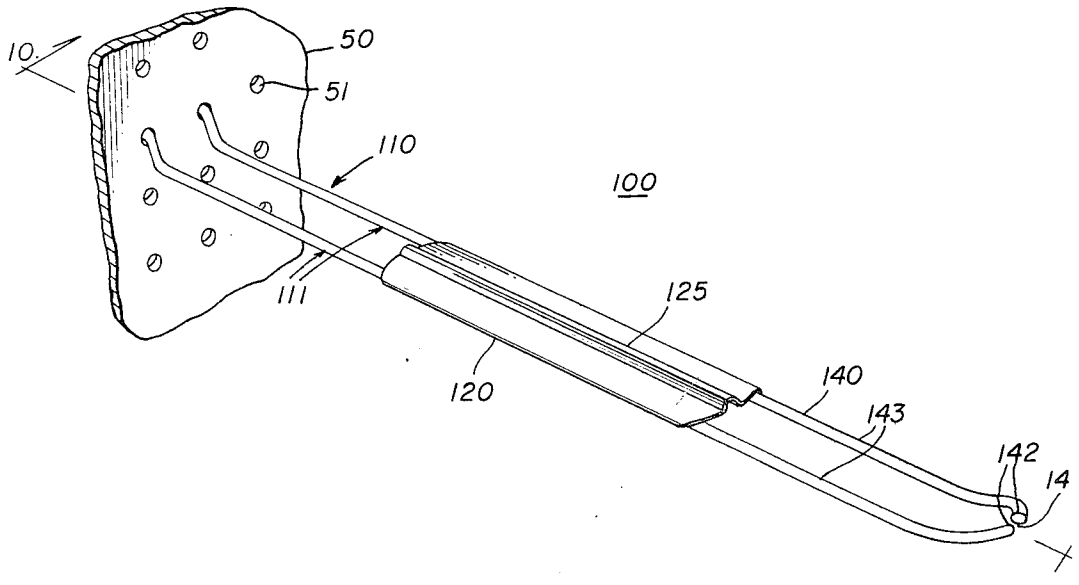
*Primary Examiner*—Roy D. Frazier
*Assistant Examiner*—Abraham Frankel
*Attorney*—Prangley, Clayton, Mullin, Dithmar & Vogel



[57] **ABSTRACT**

A hanger device comprises a support member with two spaced-apart, substantially parallel arms, and a sleevelike member which includes an upper portion and two side portions. The upper portion is disposed on the arms and the side portions are disposed therearound to enable the sleevelike member to be slid along the support member. A longitudinally extending ridge is formed in the upper portion to center hanging articles. There may also be provided an extension hook including two spaced-apart, substantially parallel arms also slidably disposed in the sleevelike member.


**5 Claims, 10 Drawing Figures**



PATENTED FEB 1 1972

3,638,801

SHEET 1 OF 2

FIG. 2

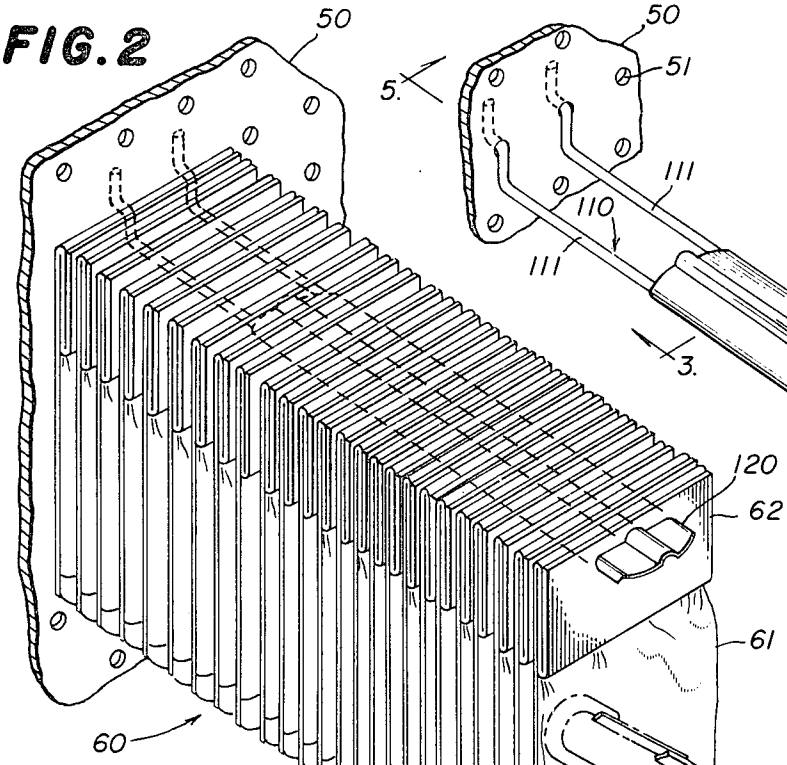



FIG. 1




FIG. 3

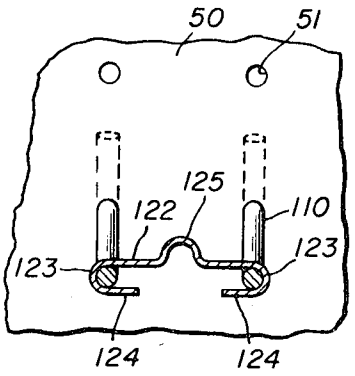



FIG. 4

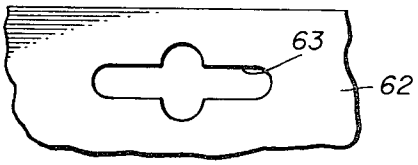



FIG. 5

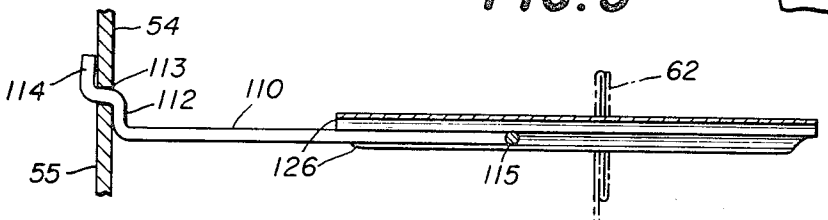
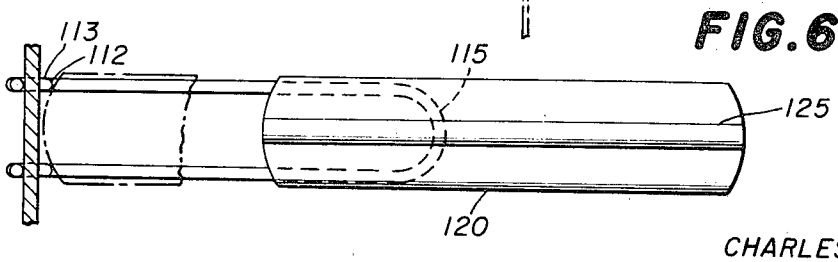



FIG. 6




INVENTOR
CHARLES O. LARSON
BY
Pringley, Clayton, Mullen & Vogel
ATTYS.

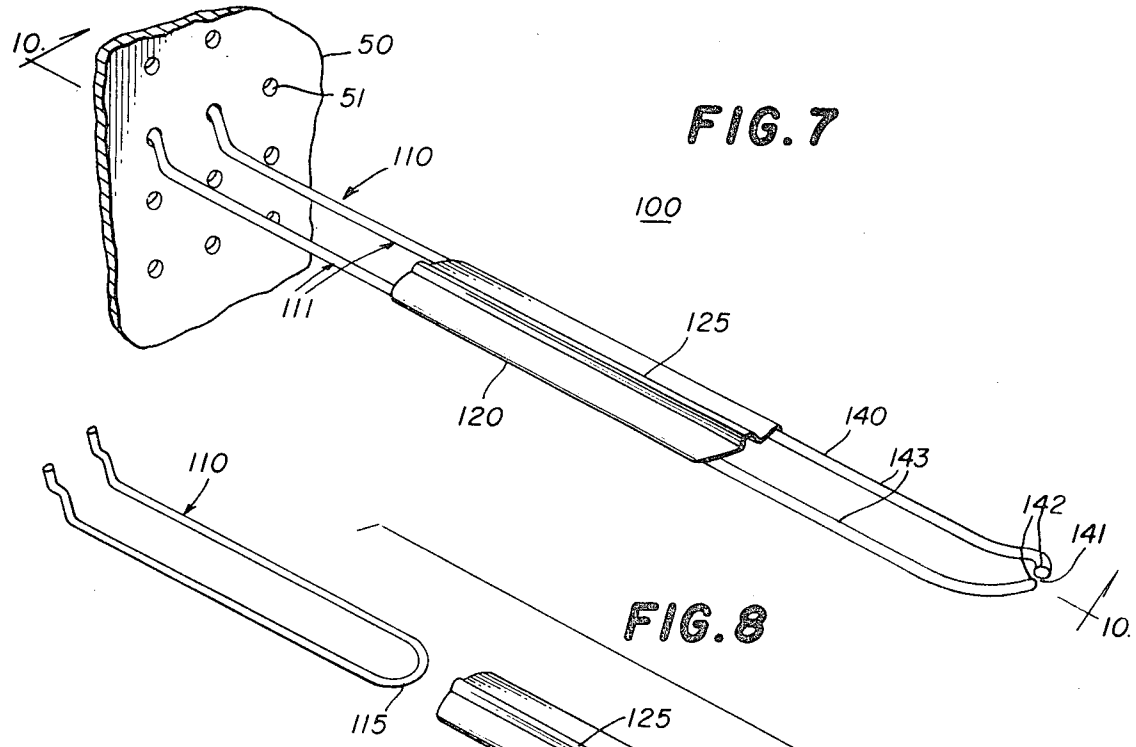



FIG. 7




FIG. 8

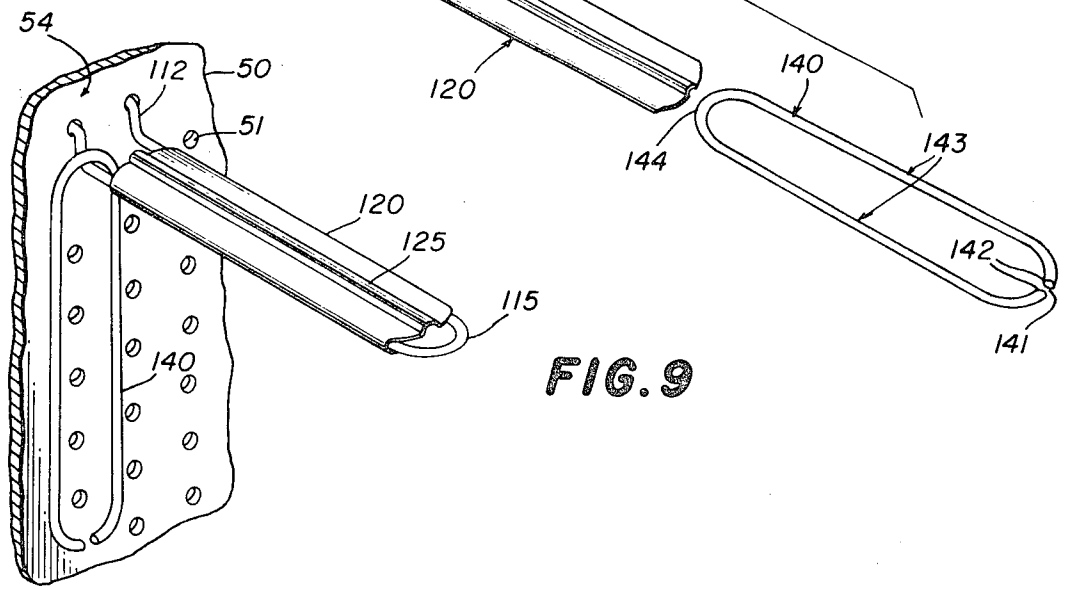



FIG. 9

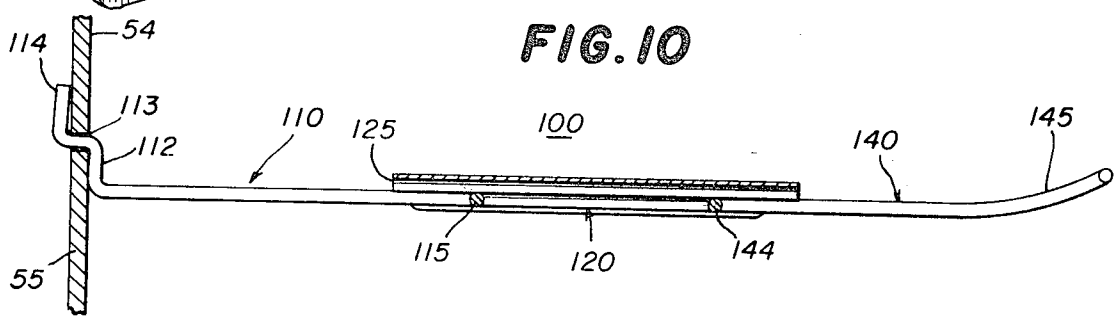



FIG. 10

# ADJUSTABLE HANGER DEVICE

This invention relates to an apertured panel hanger device for display and dispensing articles of merchandise. In particular, the invention relates to an adjustable hanger device having means for maintaining hanging articles centered on the device.

An object of the invention is to provide an adjustable hanger device for use with a supporting upstanding apertured panel having a plurality of pairs of holes therethrough, the two holes of each of the pairs of holes being aligned horizontally and spaced apart a predetermined distance, the hanger device comprising a support member including two spaced-apart substantially parallel arms each having at one end means for mounting thereof in an associated hole of one of the pairs of holes, and a sleevelike member including a single piece of material including an upper portion extending across the upper surfaces of the arms and side portions integral with the upper portion and wrapped around the outer sides of the arms, the sleevelike member being fitted across the arms and adapted to slide longitudinally along the support member for adjusting the length of the hanger device, the upper portion having an upwardly extending ridge in the center thereof to center hanging articles supported on the sleevelike member.

In connection with the foregoing object, it is another object of this invention to provide on the sleevelike member a ridge which has a U-shaped cross section.

Another object of this invention is to provide an adjustable hanger device having an extension hook including two spaced-apart substantially parallel arms extending into the sleevelike member and adapted to slide longitudinally with respect to the sleevelike member for further adjusting the length of the hanger device.

In connection with the foregoing object, another object is to provide an adjustable hanger device having an extension hook with its outer end upturned to prevent hanging articles from accidentally sliding therefrom.

In connection with the aforementioned object, it is a further object of this invention to provide an extension hook having an opening at its outer end to allow the extension hook to be hung over one of the last-mentioned arms when the extension hook is not in use.

These and other objects and advantages of the invention will become apparent from the following description taken in connection with the accompanying drawings, in which:

FIG. 1 is a perspective view of an adjustable hanger device, according to the invention, with the sleevelike member extended and mounted on an apertured panel shown fragmentally;

FIG. 2 is a perspective view of the hanger device of FIG. 1, shown carrying a plurality of packages of merchandise;

FIG. 3 is a front elevational view of a section taken along line 3—3 of FIG. 1;

FIG. 4 is a fragmental front elevational view of the top of a package of merchandise;

FIG. 5 is a side elevational view of a section taken along the line 5—5 of FIG. 1 and including a phantom view of the top of a centered hanging package of merchandise;

FIG. 6 is a top plan view of the hanger device according to the invention as shown in FIG. 1 and including a phantom fragmental view of the sleevelike member in a fully retracted position;

FIG. 7 is a perspective view of an adjustable hanger device with the sleevelike member extended and including an extension hook extending from its outer end;

FIG. 8 is a perspective view of the support member, the sleevelike member, and the extension hook illustrating their relationship to one another;

FIG. 9 is a perspective view of the adjustable hanger device showing the extension hook hung over an arm of the support member; and

FIG. 10 is a side elevational view of a section taken along line 10—10 of FIG. 7.

Referring now to FIGS. 1 to 3, inclusive, there is shown a hanger device, generally designated 100, which is mounted on an upstanding display board 50, which is preferably of the apertured paneled or perforated or hole-punched type. The holes 51 punched through the display board 50 are commonly aligned in horizontal rows and vertical columns, spaced apart a predetermined distance, as shown in FIGS. 1 and 2. The hanger device 100 comprises two pieces, a solid, U-shaped rod member 110 and a sleevelike member 120 fitted over the rod member 110 and slidable longitudinally therealong to effect adjustment of the length of the hanger device 100. Hanger device 100 is so constructed that when mounted on display board 50 it extends outwardly from and substantially normal to the plane of the display board.



In this configuration, hanger device 100 is well adapted to receive packages of merchandise for display. Such packages are shown in FIGS. 2 and 4 and are generally designated 60. Each of the packages 60 includes a bag 61 or baglike portion formed of a transparent material such as a plastic, and having an open upper end through which the articles of merchandise may be inserted. The upper end is shown in FIG. 4 and is closed by a strip 62 of relatively more rigid material, such as cardboard which is folded over the upper end of the bag and secured thereto by suitable fastening means such as staples. The strip 62 thus serves not only to close the bag 61, but also as a semirigid means for suspending the package from a supporting member, such as the hanger device of the invention.

To this end, strip 62 is formed with a crosslike slot 63 positioned in the center, so shaped that the sleevelike member 120 is capable of being passed therethrough. The shape of slot 63 resembles that of a cross, formed by two perpendicular rectangles. The rectangles have equal widths and unequal lengths with each side representing a width being arcuately shaped. The largest rectangle has its longest side substantially parallel to the top of the package and lies with its midpoint approximately at the midpoint of strip 62. The shortest rectangle is perpendicular to the largest one. FIG. 2 shows a typical arrangement of a plurality of packages 60 on the hanger device 100 according to the invention. The packages are centered on the hanger device and as packages are moved, the sleevelike member 120 is slid back along the rod member 110 so that the outermost package is always near the end of the hanger device for easy access.

In the preferred embodiment the cardboard strip 62 forms a backing which extends down the length of the bag 61, the upper end of said cardboard strip 62 being folded over the top of the bag 61 and downwardly along the front of the bag 61 for a short distance and then being folded back upwardly upon itself to thereby form a triple layer of cardboard enclosing the upper end of the bag 61 (see FIG. 5) which is then stapled to the bag. This double-folded construction affords greater strength and rigidity to the package at its point of support by the hanger device of the invention.

Referring now to FIGS. 3, 5 and 6, the construction of the hanger device according to the invention will be considered in more detail. The rod member 110 is bent into a U-shape having an arcuate closed end 115, substantially parallel arms 111 integral with said closed end 115, and preferably spaced apart a distance substantially equal to the distance between horizontally adjacent ones of the holes 51 in apertured panel 50. The length of each of the arms 111 is preferably several times greater than the separation between them. Each of the arms 111 has at its end opposite closed end 115, a means for mounting the arm on the apertured panel. This mounting means comprises a generally S-shaped prong integral with the end of each arm. Each prong includes an upstanding portion 112, substantially normal to the plane of the arms 111 and disposed to bear against the front surface 54 of the apertured panel 50, an outwardly extending portion 113 substantially parallel to both the plane of the arms 111 and to the arms themselves and directed away from the closed end 115 of the rod member 110, and an upstanding portion 114, substantially normal to the plane of the arms 111 and disposed to bear against the back surface 55 of the apertured panel 50. The portion 113 has a length only slightly greater than the thickness of the

apertured panel **50**. The tips of the mounting prongs of the arms **111** are inserted through a horizontally adjacent pair of holes **51** in apertured panel **50** and the hanger device **100** is lowered into the position shown in FIGS. **5** and **10** wherein the portion **114** bears against the back surface **55** of apertured panel **50**, portion **113** extends through the hole **51** and portion **112** bears against the front surface **54** of the apertured panel **50**. In this position the plane of the arms **111** is substantially horizontal.

The rod member **110** may be formed of any material of suitable strength and resiliency, either plastic or metal, but is preferably formed from a single piece of steel rod or wire. The rod may be of any desired diameter so long as it does not exceed the diameter of the apertured panel holes and the U-shaped member may be of any desired length to support varying numbers of packages of varying weights.

Fitted over rod member **110** is a sleevelike member **120** which is preferably formed of a single piece of material which, in its preformed condition has a length approximately equal to the length of the rod member **110**. The piece of material is shaped to extend across the arms **111** forming an upper portion **122**, to wrap around the outside of the arms **111** forming arcuate side portions **123**, and to fold back upon itself underneath the arms **111** forming lower portions **124** substantially parallel to upper portion **122**. There is thereby described a thin sleevelike member capable of being fitted over the rod member **110** from its closed end **115** and capable of being slid longitudinally along rod member **110** to extend the length thereof by varying amounts. FIG. **5** shows the member **120** in an extended position and FIG. **6** shows it in the same extended position and also shows a phantom view of it in a retracted position with the edges **126** of portions **122** and **124** in contact with portions **112** of member **110**.

In the center of the upper portion **122** there is an upwardly extending ridge **125** which is substantially U-shaped in cross section and which extends the entire length of member **120**. The height of the ridge **125** is approximately one-half the length of the vertical rectangle comprising part of slot **63**, thereby allowing the packages **60** to be easily placed on the member **120** for display, and yet preventing them from being accidentally knocked off the hanger. Once placed on the hanger, the packages are maintained in a centered position since the ridge **125** prevents them from being laterally displaced.

The sleeve member **120** may be formed from metal or plastic or any other suitable material, but in the preferred embodiment it is formed from light gauge sheet steel.

As shown in FIGS. **7** and **8**, the basic hanger device **100** of FIGS. **1** through **6** includes an additional extension hook **140** slidably mounted in the sleevelike member **120**.

The extension hook **140** has a substantially oval shape and includes a pair of substantially parallel arms **143**, and arcuate closed end **144** integral with the parallel arms, and an upturned arcuate end **145** opposite end **144** and having terminals **142** with an opening **141** therebetween. The terminals **142** are preferably flat and spaced slightly apart at a distance slightly greater than the width of an arm **111** of rod member **110** although they may abut if so desired. The end **145** is upturned and extending outwardly and curved upwardly from display board **50**. The upturned end **145** is preferably of the size and shape indicated in FIGS. **7** and **10** of the drawing and serves to prevent packages of merchandise from accidentally sliding off the hanger device **100**, if from the weight of displayed merchandise or otherwise, the hanger **100** or board **50** should become tilted slightly downward. The upturned end **145** also serves to prevent articles from being accidentally knocked off the hanger **100** by passers-by.

It is evident that this object may also be furthered by shaping the extension hook **140** so that the angle formed between the arms **143** and the upstanding portions **112** is slightly less than 90°, thereby imparting a slight upward tilt to the rod member **110** when it is in its operative position mounted on the apertured panel **50**. Thus, merchandise packages **60** will tend to slide toward panel **50** rather than away from it.

The extension hook **140** extends into the sleevelike member **120** in much the same manner as the support member **110** does. The parallel arms **143** and the arcuate end **144** fit inside the groove formed by the upper surface portion **122**, the side portions **123**, and the lower portion **124**. The hook **140** is adapted to slide longitudinally along the groove of the sleevelike member **120**, by varying amounts for further adjusting the length of the hanger device **100**.

The extension hook **140** may be formed from the same material as the supporting member **110** and may be made in a variety of sizes, although most commonly the length of the arms **143** is several times that of the distance between them, which is preferably the same as that between the arms **111** of the rod member **110**.

Referring now to FIG. **9**, the extension hook **140** is shown in its stored position. As shown, the extension hook **140** is hung over an arm **111** of the rod member **110** close to the upturned portion **112**. As previously stated, the opening **141** is larger than the width of the arm **111** to enable the hook **140** to be easily and conveniently hung in the described manner.

The addition of the extension hook to the hanger device **100** allows a merchant to exhibit a much larger quantity of merchandise at any one time. This feature provides additional storage space within view of the customer and eliminates the need for storing small quantities of a large number of items in a back room area. As the displayed merchandise is old, the extension hook is slid longitudinally rearwardly toward the front surface **54** of the display board **50** so as to keep the remaining packages **60** close to the upturned end **145** of the extension hook **140**, so that the customer may readily pick the package from the hanger device **100**. As the supply decreases, the extension hook may no longer be necessary to display the remaining packages and, at such a time, may be stored, as shown in FIG. **9** by hanging it over an arm **111** of the rod member **110**. At this time the extended sleevelike member **120** holds the next-to-be-purchased packages. Similarly, as these packages are purchased, the sleevelike member **120** is slid back until it is fully retracted and the remaining packages are contained on the rod member **110**.

In view of the foregoing, it is apparent that there has been provided a novel apertured panel hanger device characterized by easily adjustable length, simple three-piece construction for inexpensive manufacture, and an extension hook for providing adjustable increased length to the hanger, the hook being easily and conveniently stored when not in use, and a ridge being provided on the sleevelike member for centering the displayed packages.

While there has been described what is at present considered to be certain preferred embodiments of the invention, it will be understood that various modifications may be made therein, and it is intended to cover in the appended claims all such modifications as fall within the true spirit and scope of the invention.

What is claimed is:

**1**. An adjustable hanger device for use with a supporting upstanding apertured panel having a plurality of pairs of holes therethrough, the two holes of each of said pairs of holes being aligned horizontally and spaced apart a predetermined distance, said hanger device comprising a support member including two spaced-apart substantially parallel arms each having at one end means for mounting thereof in an associated hole of one of said pairs of holes, a sleevelike member including a single piece of material including an upper portion extending across the upper surfaces of said arms and side portions integral with said upper portion and wrapped around the outer sides of said arms, said sleevelike member being fitted across said arms and adapted to slide longitudinally along said support member for adjusting the length of said hanger device, and an extension hook including two spaced-apart substantially parallel arms extending into said sleevelike member and adapted to slide longitudinally with respect to said sleevelike member for further adjusting the length of said hanger device.

**2**. The adjustable hanger device of claim **1**, wherein, the extension hook has its outer end upturned to prevent hanging articles from accidentally sliding therefrom.

3. The adjustable hanger device of claim 2 wherein said extension hook has an opening at its outer end to allow said extension hook to be hung over one of said first-mentioned arms when said extension hook is not in use.

4. An adjustable hanger device for use with a supporting upstanding apertured panel having a plurality of pairs of holes therethrough, the two holes of each of said pairs of holes being aligned horizontally and spaced apart a predetermined distance, said hanger device comprising a support member including two spaced-apart substantially parallel arms each having at one end means for mounting thereof in an associated hole of one of said pairs of holes, a sleevelike member including a single piece of material including an upper portion extending across the upper surfaces of said arms and side portions integral with said upper portion and wrapped around the outer sides of said arms, said sleevelike member being fitted across said arms and adapted to slide longitudinally along said support member for adjusting the length of said hanger device, and an extension hook including two spaced-apart substantially parallel arms extending into the sleevelike member and adapted to slide longitudinally with respect to said sleevelike member for further adjusting the length of said hanger device, said upper portion having an upwardly extending ridge in the center thereof to center hanging articles supported on said sleevelike member.

5. An adjustable hanger device for use with a supporting upstanding apertured panel having a plurality of pairs of horizontally aligned holes there through, said hanger device comprising a support member including two spaced-apart substantially parallel arms, means on the end of each of said arms for insertion in the holes of the panel for mounting said hanger device thereon, and an integral sleevelike member including an upper portion and depending side portions substantially coextensive in length with said upper portion, said sleevelike member being fitted across said arms and said side portions being wrapped around the outer sides of said arms, said sleevelike member being adapted to slide longitudinally along said support member for adjusting the length of said hanger device to provide a hanger device extendable to substantially twice the length of said parallel arms, said upper portion having an upwardly protruding ridge extending substantially along the entire longitudinal extent of said upper portion in the center thereof to center hanging articles supported on said sleevelike member.

* * * * *