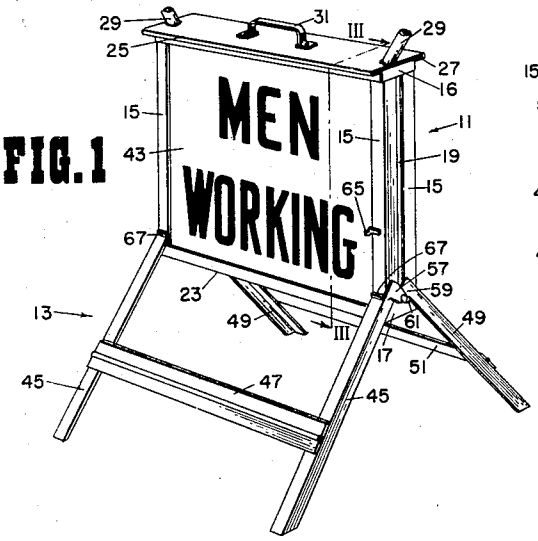
July 29, 1958 B. VANCE, JR 2,844,897

SIGN DISPLAY RACK

Filed March 7, 1957

FIG. 1



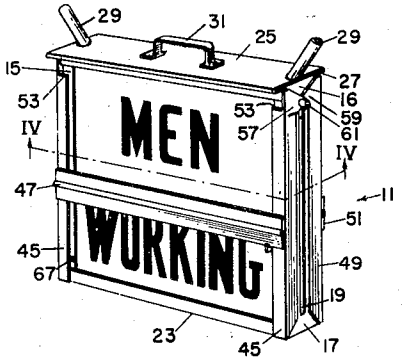


FIG. 2

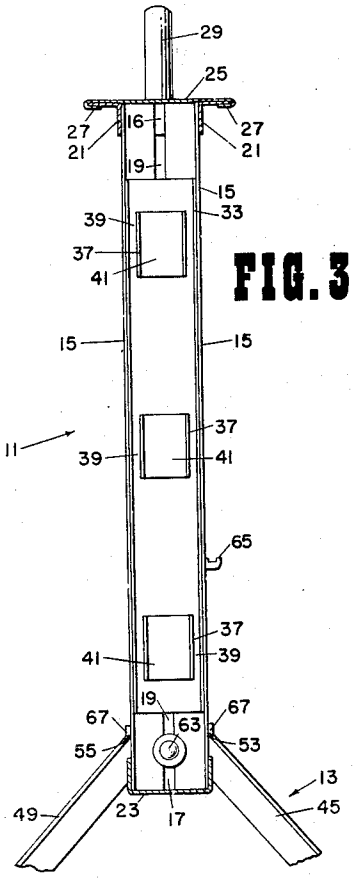


FIG. 3

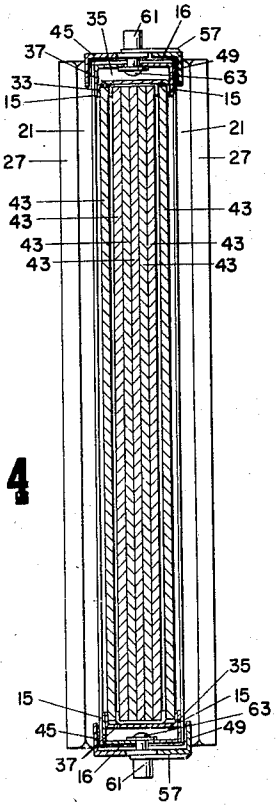


FIG. 4

INVENTOR,
Byron Vance, Jr.

BY Weatherford & Weatherford
attys

United States Patent Office 2,844,897 Patented July 29, 1958

2,844,897

SIGN DISPLAY RACK

Byron Vance, Jr., Memphis, Tenn., assignor of one-half to Walter H. Meetze, Memphis, Tenn.

Application March 7, 1957, Serial No. 644,645

8 Claims. (Cl. 40—125)

This invention relates to certain new and useful improvements in means for interchangeably displaying signs, particularly of the type adapted for use by public utilities in connection with gas and water main work, and more particularly the device relates to means for displaying selected such signs, for storing additional such signs for interchange with the displayed signs for further display, and for a new and novel means of supporting the display case by which the signs are contained and held.

It is highly desirable, particularly in connection with public utility work relating to gas and water supplies, that the workmen be supplied with a number of signs adapted for advising the passing public of a particular existent condition, and for furnishing warnings where necessary relative to the work areas. Heretofore it has been generally necessary that separate and individual standards or pedestals bearing an individual sign should be provided, resulting in the undesirable and cumbersome necessity of providing a plurality of such standards and the signs carried thereby. It has proven to be desirable for signs to be supported upon standards at a suitable height and such standards have heretofore in general required an excess amount of space in order to accommodate same, thus limiting the otherwise useful capacity of a work truck. The present invention further contemplates the provision of a new and novel standard means by which signs may be supported as at work sites.

The principal object of the present invention is to provide a sign display container adapted for the storage of substitute signs, together with standard means for supporting same.

A further object of the invention is to provide in such a device, standard means which are readily extendable into supporting position and retractable therefrom into compact storage position.

A further object of the invention is to provide alternative latch means for respectively latching such standard means in extended display position and in retracted storage position.

A further object of the invention is generally to improve the design, construction and efficiency of sign display means.

The means by which the foregoing and other objects of the present invention are accomplished and the manner of their accomplishment will be readily understood from the following specification upon reference to the accompanying drawings, in which:

Fig. 1 is a perspective view of a sign display rack of the present invention in display position.

Fig. 2 is a similar view of the present invention in storage position.

Fig. 3 is a vertical sectional view taken as on the line III—III of Fig. 1 on an enlarged scale, with the signs removed and certain parts broken away for purposes of illustration.

Fig. 4 is an inverted sectional plan view taken as on the line IV—IV of Fig. 2 on a similarly enlarged scale.

Referring now to the drawings in which the various parts are indicated by numerals, the device in general comprises a sign container means **11** and standard means **13** retractably and extendably interconnected with the container means. Container means **11** comprises opposite side sections, each of the side sections comprising a pair of vertically disposed angle members **15** which are respectively interconnected at top and bottom by plates **16, 17**. The members **15** are disposed vertically and interconnected by the connector plates **16** and **17**, with the proximate edges of the vertically disposed members **15** being spaced apart to provide an elongated guide slot **19**. As can readily be seen, the opposite side sections of container **11** are substantially identical, with members **15**, connector plates **16, 17**, and elongated slot **19** being provided in each.

The front and rear of the respective side sections are interconnected at their tops by horizontally extending angle members **21**. Preferably the angle members **21** each include a vertical flange which is rigidly connected with the opposite side sections preferably as by welding to angle members **15**, and a horizontal flange which is outwardly projected (forwardly and rearwardly) from the opposite front and rear of the container. At their lower ends, angle members **15** are seated within and rigidly interconnected with the opposite ends of an inverted channel member **23**, channel member **23** extending from side to side of container **11** and being substantially coextensive in length with upper members **21** so that the side sections, upper members and bottom channel being rigidly interconnected provide a substantial rectangular open sided box-like frame work comprising the general framework of container **11**.

Preferably, the upper end of container **11** is closed by a top **25** which includes reversely bent edge portions **27** which fit over and slidably engage with the outwardly projecting flanges of upper angle members **21** so that top **25** is slidably engaged with the container for alternatively effecting closure of container **11** and providing for access to the interior thereof. Top **25** may be provided with generally upwardly projecting sockets **29**, each adapted to receive the staff as of a signal flag, not shown. Additionally, top **25** is preferably provided with a handle **31** for the ready handling and transportation of the present invention from place to place and for assistance in the mounting and dismounting of the container with respect to the standard means to move same from and to extended display position, such as shown in Fig. 1, to and from storage or carrying position such as is shown in Fig. 2 in the manner hereinafter described.

Internally, container **11** includes sign retaining means which are rigidly fixed to and form part of the respective side sections preferably as by welding to the interior of angle members **15**. The retainer means within container **11** preferably comprise a pair of vertically disposed channel members **33** at each of the side sections, with the flanges of channel members **33** nested within the outer flanges of angle members **15** and rigidly fixed thereto preferably as by welding, and with the web of channel member **33** disposed substantially parallel to the other flanges of angle members **15** and spaced inwardly therefrom so as to provide an elongated passageway **35** communicated with slot **19**. Preferably retainer channels **33** are of a length less than the length of angle members **15** and terminate respectively above the bottom and below the top of such angle members. Preferably a plurality of retainer brackets **37** are rigidly fixed to the interior of retainer channels **33** and are vertically spaced apart therealong. Each of the retainer brackets **37** preferably comprises a short channel section of which the web is of a width less than the width of the web of re-

tainer channels **33**, and retainer brackets **37** are fixed to channels **33** so that the flanges of the brackets **37** are spaced somewhat inwardly from the flanges of channels **33**, providing thereby a narrow retainer space **39** between the respective bracket flanges and the respective channel flanges, and a larger intermediate storage space **41** within the retainer brackets **37**.

Housed within container **11** and engaged by retainer means **33, 37** are preferably a plurality of signs **43**. At the front and rear of container **11** the outermost signs **43** are exposed for display and view through the open windows formed by the open space between the inwardly projecting flanges of members **15**, the downwardly projecting flange of members **21**, and the upwardly projecting flanges of bottom member **23**. Edge portions of such outermost signs **43** are engaged in the retainer spaces **39** between the inwardly projecting flanges of retainer brackets **37** and the inwardly projecting flanges of retainer channels **33**. The remainder of signs **43** are stored within container **11** in intermediate storage space **41**, as best shown in Figs. 3 and 4.

It will thus be seen that signs **43** are retained within the container **11** and that the outermost signs, being positioned adjacent the open front and rear of the container, are exposed for display purposes and are held against movement transversely of the casing by the retainer means **33, 37**. Additionally, it will be observed that the displayed signs **43**, as well as the stored signs **43**, are held against movement endwise by the webs of the retainer means which extend throughout a substantial portion of the depth of the signs from top to bottom, and which thus effectively segregate the signs away from the elongated passageways **35** formed in the side sections of container **11**. Additionally, signs **43** extend upwardly above the upper end of retainer channels **33** so that the signs are conveniently available for grasping when the container is opened for access to the interior by the sliding removal of top **26** from upper angles **21**.

Standard means **13** includes a pair of front legs **45** interconnected by a cross bar **47** and a pair of rear legs **49** interconnected by a cross bar **51**. Preferably each of the legs **45, 49** is formed from an angle member of conformation similar to the side angles **15**, and front legs **45** each include a front flange and a side flange, while the rear legs **49** each include a rear flange and a side flange. The front flanges of front legs **45** are cut off as at **53** to provide a shoulder, and similarly, the rear flanges of rear legs **49** are cut off as at **55** to provide similar shoulders.

Front legs **45** adjacent the upper end of the side flanges thereof are each provided with a rearwardly projecting attachment lug **57**, lugs **57** extending rearwardly beyond the rearward edge of the side flanges of legs **45**. Similarly, the side flanges of rear legs **49** are provided with forwardly projecting attachment lugs **59**. Attachment lugs **57, 59** are respectively attached to the legs **45, 49** adjacent the uppermost ends of the respective legs, and the lugs project toward each other onto lapping relation, preferably lugs **57** being offset to the side so as to overlap and lie outside of lugs **59**. Lugs **57, 59** are suitably apertured and the apertures therein are arranged in register so as to receive and be pivotally interconnected by a stud **61**, it being observed that there is a similar arrangement of stud **61** projecting through lugs **57, 59** in each of the side sections of the container, as best shown in Fig. 4.

It will be seen that thereby the upper ends of legs **45, 49** are respectively pivotally or hingedly interconnected for folding and unfolding movement, and that the disposition of the attachment lugs **57, 59** are such as to dispose the stud **61** to lie between the respective front and rear legs, with the upper ends of these legs being maintained in spaced apart relationship. Stud **61** projects through guide slot **19** so that the enlarged head **63** of stud **61** is disposed and housed within passageway **35** with stud **61** being freely slidable along guide slot **19** and with the stud head being maintained for free movement within the passageway by the segregating effect of the retainer channels **33**. It thus will be seen that the legs **45, 49** pivotally interconnected by stud **61** are mounted for relative vertical shifting movement along container **11** by the engagement of stud **61** with guide slots **19**, and that the standard means comprising the legs and the interconnecting studs and cross bars are shiftable from a storage position such as is shown in Fig. 2 to an extended display position as shown in Fig. 1, and may be reversely shifted from the display position to the storage position.

In the storage position shown in Fig. 2 the legs are moved upwardly so as to lie along and to nestingly embrace side angles **15**, with studs **61** moved adjacent the uppermost ends of slots **19** being limited in this upward travel by upper connector plates **16**. In this position a hook **65**, which is mounted on at least one of the side angle members **15**, is engaged by the lower edge of one of the cross bars, as for example the front cross bar **47**. In this manner the legs are retained by the hook shape of hook **65** against free outward swinging, and the legs and cross bars are biased by gravity so that the cross bar is seated on and supported by hook **65**, thus preventing the downward relative movement of legs **45, 49**, relative to container **11**. In this position the stud **61** is spaced slightly below upper connector plate **16** under the influence of gravity on the legs, cross bars and studs which are interconnected and engaged with the slots **19**. As shown in Fig. 2, the device when thus compacted into this storage position, is capable of ready transportation through the utilization of handle **31** so as to carry the same from place to place, and also providing a very compact arrangement of the container and standard means for convenient storage, as for example in a work truck.

When it is desired to erect the sign display at a selected site, the legs **45, 49** are to be extended relatively to container **11**, and for this purpose the cross bar **47** is freed from hook **65** and the studs **61** will move downwardly along slots **19** lowering the legs relatively to container **11** until the studs **61** have reached the lower end of slots **19**, being limited from further overtravel beyond this position by bottom connector plate **17**. At this position the legs may be spread outwardly as illustrated in Fig. 1, and the front shoulders **53** respectively engaged with the underside of a pair of front stops **67** mounted adjacent but slightly above the lower ends of front side members **15**, and similarly rear shoulders **55** may be engaged with similar stops **67** carried by the rear side members **15**. Thus it will be seen that standard means **13** when extended to the display position of Fig. 1 are effectively retained in this position against upward movement relative to container **11** by the interengagement of the shoulders **53, 55** with the stops **67**, and this engagement is maintained by the weight of container **11** forcing stops **67** downwardly to seat solidly against shoulders **53, 55**.

As can readily be seen, when it is desired to return the display device to the storage position as shown in Fig. 2, the container may be lifted by use of the handle **31**, relieving the effect of gravity on the container and moving the stops **67** away from leg shoulders **53, 55**, freeing the legs of the restraint imposed thereon and permitting the legs to swing under the additional influence of gravity into proximity and substantial alinement with the side members **15**. Thereupon, with the shoulders freed from the stops and the legs swung inwardly, the device may be lowered by merely reducing the upward pull on handle **31**, permitting the container **11** to move downwardly relatively to standard means **13**, the slots **19** moving downwardly along studs **61**, with the passage of the stud heads through passageways **35** being maintained free from interference by the segregating effect of the passageways. A simple outward movement

permits cross bar **47** to pass over hook **65** and thereafter the cross bar may be swung inwardly to seat on and engage with the hook as shown in Fig. 2. It will be observed that the cross bar **47** is spaced above the lower end of legs **45** a distance substantially equal to the spacing of hook **65** above the lower edge of container **11** so that when the legs have been moved into the storage position they do not project below the lower extremity of container **11**, thus additionally providing for compactness of the device when in such storage position.

It will further be observed that when it is desired to interchange the sign being displayed through the front and rear of container **11**, top **25** may be very simply slidably removed from upper members **21**, thus providing for access to the interior of container **11** and to the additional signs **43** such as those stored within the storage space **41**. With access thus provided, the displayed sign may be removed from retainer spaces **39** and a new sign placed in lieu thereof, with the removed or displaced sign being then returned to the storage place awaiting further and future use. The top **25** may then be slidably reengaged with upper members **21** and the device is in condition for further usage.

I claim:

1. In a sign display device, container means comprising a framework having an open front and an open rear for respectively displaying a selected sign surface, said frame including opposite side sections; each said side section comprising vertical side members forming part of said framework and each including a side flange, said flanges being interconnected in spaced apart relation to provide an elongated vertical guide slot, supporting standard means comprising a pair of front legs and a pair of rear legs, said legs each including an offset attachment lug fixed adjacent the upper ends of said legs, said front legs lugs respectively lapping said rear leg lugs, opposite studs pivotally interconnecting said lapped lugs to connect said front legs respectively with said rear legs and positioned between the legs so connected, said studs projecting through and slidably engaging said slots and terminating in enlarged heads lying inwardly of said flanges shiftably attaching said legs to said side sections for relative vertical shift along said side sections; a plurality of signs housed in said container and extending from side section to side section, retainer means secured to said side sections each including a web spaced inwardly from said flanges and spanning across the slots between said flanges to provide a passageway housing said stud head, said web being positioned closely adjacent the edges of said signs and segregating said sign edges from said passageway, said retainer means including means separately engaging the forwardmost and rearmost of said signs respectively closely adjacent said open front and rear, stop means carried by said side members engaging the upper extremities of said legs remote from said studs with said legs extending downwardly therebelow and said studs seating in the lower ends of said slots to support said container and said signs in display position, said legs being retractable under stud shift along said slots to a retracted storage position in which said legs nestingly embrace said side members, hook means carried by at least one of said side members, and means connected with said legs engaging said hook means to retain said legs in retracted condition.

2. In a sign display device, container means comprising a framework having an open front and an open rear for respectively displaying a selected sign surface, said frame including opposite side sections; each said side section comprising vertical side members forming part of said framework and each including a side flange, said flanges being interconnected in spaced apart relation to provide an elongated vertical guide slot, supporting standard means comprising a pair of front legs and a pair of rear legs, said legs each including an offset attachment lug fixed adjacent the upper ends of said legs, said front leg lugs respectively lapping said rear leg lugs, opposite studs pivotally interconnecting said lapped lugs to connect said front legs respectively with said rear legs and positioned between the legs so connected, said studs projecting through and slidably engaging said slots and terminating in enlarged heads lying inwardly of said flanges shiftably attaching said legs to said side sections for relative vertical shift along said side sections; a plurality of signs housed in said container and extending from side section to side section, retainer means secured to said side sections each including a web spaced inwardly from said flanges and spanning across the slot between said flanges to provide a passageway housing said stud head, said web being positioned closely adjacent the edges of said signs and segregating said sign edges from said passageway, said retainer means including means separately engaging the forwardmost and rearmost of said signs respectively closely adjacent said open front and rear, stop means carried by said side members engaging the upper extremities of said legs remote from said studs with said legs extending downwardly therebelow and said studs seating in the lower ends of said slots to support said container and said signs in display position, said legs being retractable under stud shift along said slots to a retracted storage position in which said legs nestingly embrace said side members.

3. In a sign display device, container means comprising a framework having an open front and an open rear for respectively displaying a selected sign surface, said frame including opposite side sections; each said side section comprising vertical side members forming part of said framework and each including a side flange, said flanges being interconnected in spaced apart relation to provide an elongated vertical guide slot, supporting standard means comprising a pair of front legs and a pair of rear legs, opposite studs pivotally interconnecting said front legs respectively with said rear legs, said studs projecting through and slidably engaging said slots and terminating in enlarged heads lying inwardly of said flanges shiftably attaching said legs to said side sections for relative vertical shift along said side sections; a plurality of signs housed in said container and extending from side section to side section, retainer means secured to said side sections each including a web spaced inwardly from said flanges and spanning across the slot between said flanges to provide a passageway housing said stud head, said web being positioned closely adjacent the edges of said signs and segregating said sign edges from said passageway, said retainer means including means separately engaging the forwardmost and rearmost of said signs respectively closely adjacent said open front and rear, stop means carried by said side members engaging the upper extremities of said legs remote from said studs with said legs extending downwardly therebelow and said studs seating in the lower ends of said slots to support said container and said signs in display position, said legs being retractable under stud shift along said slots to a retracted storage position in which said legs nestingly embrace said side members.

4. In a sign display device, container means comprising a framework having an open front and an open rear for respectively displaying a selected sign surface, said frame including opposite side sections; each said side section comprising vertical side members forming part of said framework and each including a side flange, said flanges being interconnected in spaced apart relation to provide an elongated vertical guide slot, supporting standard means comprising a pair of front legs and a pair of rear legs, opposite studs pivotally interconnecting said front legs respectively with said rear legs, said studs projecting through and slidably engaging said slots and terminating in enlarged heads lying inwardly of said flanges shiftably attaching said legs to said side sections for relative vertical shift along said side sections; a plu-

rality of signs housed in said container and extending from side section to side section, means positioned closely adjacent the edges of said signs and segregating the edges of said signs from said stud heads, stop means carried by said side members engaging the upper extremities of said legs remote from said studs with said legs extending downwardly therebelow and said studs seating in the lower ends of said slots to support said container and said signs in display position, said legs being retractable under stud shift along said slots to a retracted storage position in which said legs nestingly embrace said side members.

5. In a sign display device, container means comprising a framework having an open front and an open rear for respectively displaying a selected sign surface, said frame including opposite side sections; each said side section comprising vertical side members forming part of said framework and each including a side flange, said flanges being interconnected in spaced apart relation to provide an elongated vertical guide slot, standard means comprising a pair of front legs and a pair of rear legs, opposite studs pivotally interconnecting said front legs respectively with said rear legs, said studs projecting through and slidably engaging said slots and terminating in enlarged heads lying inwardly of said flanges shiftably attaching said legs to said side sections for relative vertical shift along said side sections; stop means carried by said side members engaging the upper extremities of said legs remote from said studs with said legs extending downwardly therebelow and said studs seating in the lower ends of said slots to support said container in display position, said legs being retractable under stud shift along said slots to a retracted storage position in which said legs nestingly embrace said side members.

6. In a sign display device, container means comprising a framework having an open front and an open rear for respectively displaying a selected sign surface, said frame including opposite side sections; each said side section comprising vertical side members forming part of said framework and each including a side flange, said flanges being interconnected in spaced apart relation to provide an elongated vertical guide slot, standard means comprising a pair of front legs and a pair of rear legs, said legs each including an offset attachment lug fixed adjacent the upper ends of said legs, the lugs on said front legs respectively lapping the lugs on said rear legs, opposite studs pivotally interconnecting said lapped lugs to connect said front legs respectively with said rear legs and positioned between the legs so connected, said studs projecting through and slidably engaging said slots and terminating in enlarged heads lying inwardly of said flanges shiftably attaching said legs to said side sections for relative shift along said side sections; stop means carried by said side members engaging the upper extremities of said legs remote from said studs with said legs extending downwardly therebelow and said studs seating in the lower ends of said slots to support said container in display position, said legs being retractable under stud shift along said slots to a retracted storage position in which said legs nestingly embrace said side members.

7. In a sign display device, container means comprising a framework having an open front and an open rear for respectively displaying a selected sign surface, said

frame including opposite side sections; each said side section comprising vertical side members forming part of said framework and each including a side flange, said flanges being interconnected in spaced apart relation to provide an elongated vertical guide slot, standard means comprising a pair of front legs and a pair of rear legs, said legs each including an offset attachment lug fixed adjacent the upper ends of said legs, the lugs on said front legs respectively lapping the lugs on said rear legs, opposite studs pivotally interconnecting said lapped lugs to connect said front legs respectively with said rear legs and positioned between the legs so connected, said studs projecting through and slidably engaging said slots and terminating in enlarged heads lying inwardly of said flanges shiftably attaching said legs to said side sections for relative vertical shift along said side sections; stop means carried by said side members engaging the upper extremities of said legs remote from said studs with said legs extending downwardly therebelow and said studs seating in the lower ends of said slots to support said container in display position, said legs being retractable under stud shift along said slots to a retracted storage position in which said legs nestingly embrace said side members, and means connected with said legs and said side members to retain said legs in retracted condition.

8. In a sign display device, container means comprising a framework having an open front and an open rear for respectively displaying a selected sign surface, said frame including opposite side sections; each said side section comprising vertical side members forming part of said framework and each including a side flange, said flanges being interconnected in spaced apart relation to provide an elongated vertical guide slot, supporting standard means comprising a pair of front legs and a pair of rear legs, said legs each including an offset attachment lug fixed adjacent the upper ends of said legs, the lugs on said front legs respectively lapping the lugs on said rear legs, opposite studs pivotally interconnecting said lapped lugs to connect said front legs respectively with said rear legs and positioned between the legs so connected, said studs projecting through and slidably engaging said slots and terminating in enlarged heads lying inwardly of said flanges shiftably attaching said legs to said side sections for relative vertical shift along said side sections; web means spaced inwardly from said flanges and spanning across the slot between said flanges to provide a passageway housing said stud head, stop means carried by said side members engaging the upper extremities of said legs remote from said studs with said legs extending downwardly therebelow and said studs seating in the lower ends of said slots to support said container in display position, said legs being retractable under stud shift along said slots to a retracted storage position in which said legs nestingly embrace said side members, hook means carried by at least one of said side members, and means connected with said legs engaging said hook means to retain said legs in retracted condition.

References Cited in the file of this patent

UNITED STATES PATENTS

1,135,241	Woods	Apr. 13, 1915
1,877,326	Schwartz et al.	Sept. 13, 1932
1,930,445	Schwartz et al.	Oct. 10, 1933