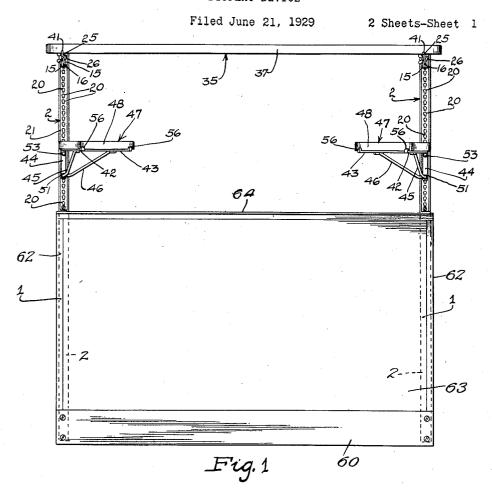
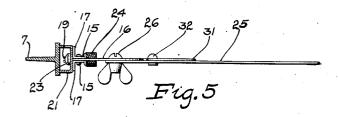
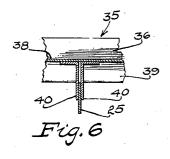
DISPLAY DEVICE







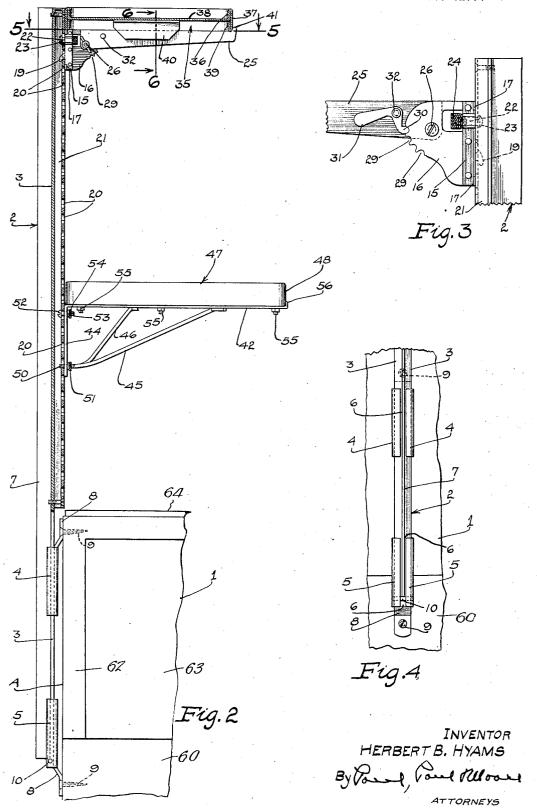
INVENTOR HERBERT B. HYAMS By Paul Miloon

ATTORNEYS

DISPLAY DEVICE

Filed June 21, 1929

2 Sheets-Sheet 2 ·



## UNITED STATES PATENT OFFICE

## 1,941,838

## DISPLAY DEVICE

Herbert B. Hyams, St. Paul, Minn. Application June 21, 1929. Serial No. 372,609

3 Claims. (Cl. 211-136)

This invention relates to improvements in display devices, and is particularly concerned with the arrangement of a shelf and shelf-supporting attachment which can be applied to a show

An important object of the invention is to provide means for displaying goods, which means is arranged at the back of a show case (or at a point intermediately of the front and 10 back) with the shelves supported above the show case in a manner to permit access to the goods on the shelves from both sides of the case, with the shelves arranged to form a kind of window or open space through which the clerk and customer can have unobstructed views of one another. Another object is to provide a knockdown shelf and shelf-supporting and attaching device of the nature described, which provides sets of parts which can be quickly arranged in 20 shelf-forming and supporting position. Another object, which relates to the arrangement of the shelves to form a kind of window for the purposes above mentioned, is to provide an elongated top shelf arranged to be substantially just above the level of the head of the clerk, and to provide below it and between it and above the top of a counter, small shelves separately supported each by one upright of a pair of uprights, which together support an upper elongated shelf. Another object is to provide shelfsupports which can be arranged at an angle to correspondingly arrange the shelves at an an-Other objects are to provide means for quickly adjusting the vertical heights of the shelves; to provide sockets connectible to any one of a plurality of counters or show cases with which can be engaged the shelf-supporting uprights of this invention, thereby enabling the proprietor to make more economic use of one or more of the attachments by being able to arrange them at different positions in the store and to constantly change their location without being put to the additional expense of buying extra fixtures, a small number of sockets only being necessary. This feature of the interchangeable attachment on a plurality of counter show cases is a valuable feature of the invention, as is also the arrangement of the shelves at the back of the show case leaving the counter free, and giving a window-like formation for the purposes

above mentioned. The present invention is also to be considered as an attachment, and each one of the standards to which the shelf-supports are attachable is to 55 be considered as an attachment, because each can be separately attached, with display shelves adjustable thereon, or both standards can be attached in a manner to form a window by crossconnecting them by a shelf, and/or by using a 60 shelf or shelves separately attached to each stand-

ard and also arranged to form a window through which clear views of customer and clerk can be had, each by the other. This is a valuable feature of the invention. Moreover, the device includes, as well, a simple standard or element hav- 65 ing means to secure a shelf at different levels, along with a socket which can be attached anywhere, for instance in a show window, in the corner of a show window or centrally of a show win-

I am aware that it is old to use glass shelves supported above show cases from the ceiling or from supports not attached to the case, but this type of shelf is objectionable for many reasons some of which are: frangibility, expense and weight 75 (because heavy glass must be used if the shelf is to have large display capacity). Moreover, it has been the practice to arrange these glass shelves at points inaccessible to clerk and customer, or if accessibly arranged to obstruct the view of each - 80 with respect to the other. The practice of the invention herein overcomes all of the objections of prior devices for the same purpose known to me.

Features include all details of construction, together with the ideas of: spacing the parts to form a window-like opening, and placing of the goods display elements at levels and at locations accessible to both parties at opposite sides of the case. Other features relate to the provision of means 90 whereby a number of cases are equipped to support the device of the invention herein in operative relation so that the attachment may be removed from one case, and removably secured to another; and to the idea of slidably adjusting the 95 top and/or intermediate shelves lengthwise of the brackets.

Other objects, advantages and features will be set forth in the description of the drawings forming a part of this application, and in said draw-

Figure 1 is a front view of a case showing my invention applied thereto, and illustrating the formation of the window-like arrangement of the

Figure 2 is a side view of Figure 1 showing the attachment partly in section, and showing only a fragment of a show case;

Figure 3 is a fragmentary detail illustrating the preferred form of shelf-supporting arm;

Figure 4 is a fragmentary face view illustrating the relation of one form of socket to one form of upright or standard;

Figure 5 is a plan section on line 5-5 of Figure 2 further illustrating the shelf-supporting arm or 115 bracket of Figure 3; and

Figure 6 is a vertical section on line 6-6 of Figure 2, showing one means for securing the shelf upon the arm in a manner to permit shelf-adjustment in direction lengthwise of the arm.

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Numeral 1 indicates a show case or counter, and numeral 2 generally indicates the upright or standard. In this instance this upright is formed from a T-iron having flanges 3, see Figure 4, engaging socket pieces 4-5. Each socket piece is formed from a single piece of material, by stamping and bending to provide guides and a slot 6 for receiving the flange 7, which projects outwardly beyond the sockets as shown in Figure 2. Each 10 socket is provided with an integral arm 8 secured by a suitable fastening device 9 to the case. cross pin 10 limits downward movement of the standard in the sockets. The provision of sockets or means attachable to the cases for securing 15 the uprights to extend above any case, is a feature of the invention.

The uprights 2 can be attached at the back of the case, or to the sides of the case at a point intermediate its front and back faces. The shelf 20 or shelves, later to be described, and supported by the uprights, are arranged to form with the case a window-like opening through which, when the shelves are loaded with goods, the clerk and customer can have an unobstructed view of one another, and so that the goods are easily accessible to both from opposite sides of the case. To carry out this feature of the invention the standards 2 have shelf-supported means, in this instance adjustable thereon, and preferably adjustable, along with means by which they are attached to the standards. These shelf-supporting means or brackets form features of the invention. The preferred form of the support or bracket, see Figures 2, 3 and 5, includes a body or attaching 35 portion composed of elements 15 riveted to an intermediately disposed extension element 16. Each element 15 is provided with two lateral extensions 17 arranged to brace the element 16 against horizontal swinging motion. Each of 40 these elements is also provided with a hook-like extension 19 adapted to enter keyhole slots 20. in an element 21 secured to the face of the upright 2. The elements 15 are formed to provide a guide for the shank 22 of an attaching screw, the 45 head of which is shown at 23, the head being also adapted to enter any keyhole slot 20 and engage therewith to prevent withdrawal, and to obtain clamping action by manipulation of the thumb nut 24. The head 23 and hook 19 engage in re-50 spective keyhole slots, to secure element 16 in outstanding relation to standard 2. Pivoted to this element 16 is a shelf supporting arm 25 which may be of any length either the same or greater than shelf width. The pivot is shown at 26. This pivot has the form of a machine screw, and a clamping thumb nut is used to secure the part 25 in adjusted position. The arm 25 can. however, be held in various angular relations by means of a series of notches 29 any one of which is adapted to be engaged by the projection 30 of lever 31 pivoted at 32 upon the arm 25, see Figure 3. It is conceivable that in a broad view of the invention, other means for attaching the shelf-supporting arms or brackets could be used. -65 A modification of this means is shown in Figure 2, and will be later described.

A feature of this invention includes the arrangement of the uprights at the back of a show case, and extending above the case, and the support of a single shelf by both uprights in a manner to form with the casing a window-like opening above the case through which the clerk and customer can have an unobstructed view of one another over a substantial area lengthwise of the case when the shelf is loaded with goods. To

this end, an elongated shelf 35 is used, the construction of which shelf is also a feature of the invention. This shelf is made of a single piece of metal bent upwardly as at 36 (to form a marginal stiffening and retaining flange) see Figure 2, and then bent downwardly upon itself as shown at 37 to extend to the opposite side of the shelf or body portion 38, and then bent upwardly and inwardly again as at 39 to finally form a twoply-T-shaped flange for the purposes set forth. The flange-like stiffening element thus formed is continuous around the shelf, and provides a very simple means for reinforcing and stiffening the shelf so that a long shelf will have great supporting power. Another feature of the invention includes the arrangement of this shelf so that it can be adjusted outwardly lengthwise of the shelf support, and to this end the shelf is provided with a pair of elements 40, see Figure 6, arranged to form a slot in which element 25 or its equivalent is engaged so that the shelf is slidably adjustable lengthwise of the arm 25. In Figure 2 the arm 25 has been shown with a terminal stop lug 41 which acts to prevent lengthwise movement, but it will be understood that the 100 element 25 may be much longer than the width of the shelf shown in the drawings, so that the shelf may be adjusted as above set forth.

Another feature of the invention is the arrangement of the uprights to form with the case a win- 105 dow-like opening in which an upper shelf similar to 35 is attached, and in which an additional shelf is, or a plurality of such shelves are, carried by each upright 2, the individual shelves being wholly supported by respective uprights, rather than by 110 two uprights as in the case of the shelf 35, or its equivalent. In this case also a window-like opening is formed through which (when the shelves are loaded with goods) the clerk and customer can have an unobstructed view of one another, and 115 so that the goods are easily accessible to both from opposite sides of the case. The construction of the brackets or supports for these last mentioned shelves is a feature of the invention and shows a modified construction over the structure of Fig- 120 ures 3 and 5. Two angularly related arms 42—43 are immovably attached to vertical member and brace members 45-46 respectively for the arms 42-43. The shelves 47 are in this instance substantially triangular in plan, with one point 125 of the triangle lying over the element 44. The outer side 48 of the shelf is curved. It will be, of course, understood that the configuration may be varied. The means for securing the arm or bracket to the element 21 or its equivalent (a fea-130 ture of the invention) consists in this case of a threaded extension 50 of the brace 45 which passes through the element 44 and engages the lower portion of a keyhole slot 20 as shown in Figure 2, with the threads coacting with the slot wall to 135 resist outward withdrawal of the extension. A nut 51 engaged with the threads of the extension provides a stop for the element 45 at opposite side of element 44. The head 52 of screw 53 engages the upper portion of the keyhole slot as  $_{140}$ shown, and a nut 54 clampingly secures the device in operative position. The shelf 46 may be secured to the arms 42-43 by bolts 55 passing through shelf and arm, the terminals of the elements 42-43 are upturned as at 56 to form stops engaging the outer curved surface 48 of the shelf. Of course, the bolts 55 may be dispensed with, and the shelves simply secured against slipping by stops 56.

It is to be understood that the surface A of the

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Figure 2 may well be either at the back or the end of a case, and that the standard may rise from the sides at points midway between the front and back to increase accessibility, for in-5 stance for the customer. When the standards are arranged at the back corners of the case, either on the back surface or on the side surfaces, and when the case is a wide one, of course the shelves may be more accessible to the clerk than 10 to the customer, but in any event the shelves are arranged so as not to obstruct the view of either. As before noted, a number of cases can be equipped with sockets or equivalent devices to receive and support the uprights, so that in this way the up-15 rights are interchangeable from case to case, and all cases are conditioned to receive and support the shelf-forming elements. This is a valuable feature.

It will be understood that a single type of 20 bracket, as shown at the top of the figures, may be used and this is the preferred form. However, the type of bracket shown at the point intermediate between the top shelf and the top of the case is also a feature of the invention although this structure does not as easily lend itself to a horizontal adjustment of the shelf, or an adjustment lengthwise of the arm, as in the preferred form of bracket.

It will be understood that the uprights 2 can 30 be extended to the floor, and that suitable floor sockets can be provided, and it will be further understood that any suitable means may be used to secure the uprights in operative relation to the case. The principal feature of the invention is 35 the arrangement in reference to the case to provide the window-like opening, and to maintain the unobstructed view. It will be moreover understood that other forms of shelf supports and other means for attaching such supports to the uprights can be used without departing from that feature of the invention which relates to the window-like arrangement of the parts. Some types of knock-down cases are rickety and when this type is used it is better to have the weight of 45 the display device supported directly by the floor, with means to secure the bottom of the uprights against movements with reference to the floor and case, and with means to secure the uprights in vertical position, whether this means attaches 50 the uprights directly to the case, or to some other support.

This invention finds valuable application in combination with counter showcases of the "all glass" type having a base unit 60 upon which is 55 disposed a skeleton frame including upright elements 62 at the corners, front and back. The case has a heavy glass 63 at the front (and sides), a top slab 64 of heavy glass, and lightweight rear doors, not shown in the drawings. Due to the joints between the base and the skeleton frame or between the base and the glass super-structure (including sides, front and back walls supported by said skeleton frame) the cases become rickety, the tendency being to incline or lean forwardly 65 toward the customer's side, when heavily loaded on top with goods. The practice of this invention results in stiffening of the case, and it will be noted that the bottom socket 5, see Figure 2, is attached to the base 60, while the upper socket 4 70 is attached adjacent the top of the top of the case. Each standard when engaged in this set of sockets acts as a case reinforcing element. It is partly due to this reinforcing feature that the case and shelf can support unusually heavy loads

of display goods on the top of the counter and on the shelf 35, above the top of the counter.

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I claim as my invention:

1. A goods display device adapted to be attached to a glass show case which case has a base and upright frame members including corner uprights which support the glass, said device consisting of two standards adapted to be attached to respective corner uprights which are spaced lengthwise of the case, said standards being of a length to extend a substantial distance above the top of the case when attached, socket means for detachably securing each standard to the corresponding upright and to the base, an arm for each standard adapted to overlie and be spaced above the case when the standards are attached, and a shelf adapted to bridge and be supported by the arms and overlie the case, so that the standards and shelf form with the case an unobstructed window-like opening, said socket means being so formed that the uprights are slidably related thereto to allow translation to cause the bottoms of the standards to rest upon the floor, and detachable means for securing the uprights in said socket means with their ends above the floor.

2. A device of the class described adapted to be applied to a glass show case, which case includes a base and upright frame elements including corner elements, said device comprising two standards, one for each of two corner uprights which 105are spaced in a direction lengthwise of the case, said standards being of a length to extent substantially the full height of the case and a substantial distance thereabove when attached, socket elements a pair for each of the two upright 110 corner elements, said uprights being slidable in said socket elements, an arm for each standard, a single shelf adapted to be supported by the arms over the case, means for adjusting the arms to place the shelf at such a level above the level of the eyes of persons standing respectively at the front and back of the case, that an unobstructed view of one another beneath the shelf and goods

may be had. 3. A device of the class described adapted to 120 be applied to a glass show case, which case includes a base and upright frame elements including corner elements, said device comprising two standards, one for each of two corner uprights which are spaced in a direction lengthwise of the case, said standards being of a length to extend substantially the full height of the case and a substantial distance thereabove when attached, socket elements a pair for each of the two upright corner elements, said uprights being slidable in said socket elements, an arm for each standard, a single shelf adapted to be supported by the arms over the case, means for adjusting the arms to place the shelf at such a level above the level of the eyes of persons standing respectively at the front and back of the case, that an unobstructed view of one another beneath the shelf and goods may be had, the members of each pair of socket elements being respectively attached to the upright and the base to act with the uprights to reinforce the case, and means which can be applied for holding the lower ends of the standards above the floor or which can be removed to permit the ends to engage the floor, 140 whereby the weight of the goods support and load thereon can be supported by the floor, and whereby the case may act only to prevent tipping of the loaded goods display device.

HERBERT B. HYAMS.

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