

Oct. 6, 1931.

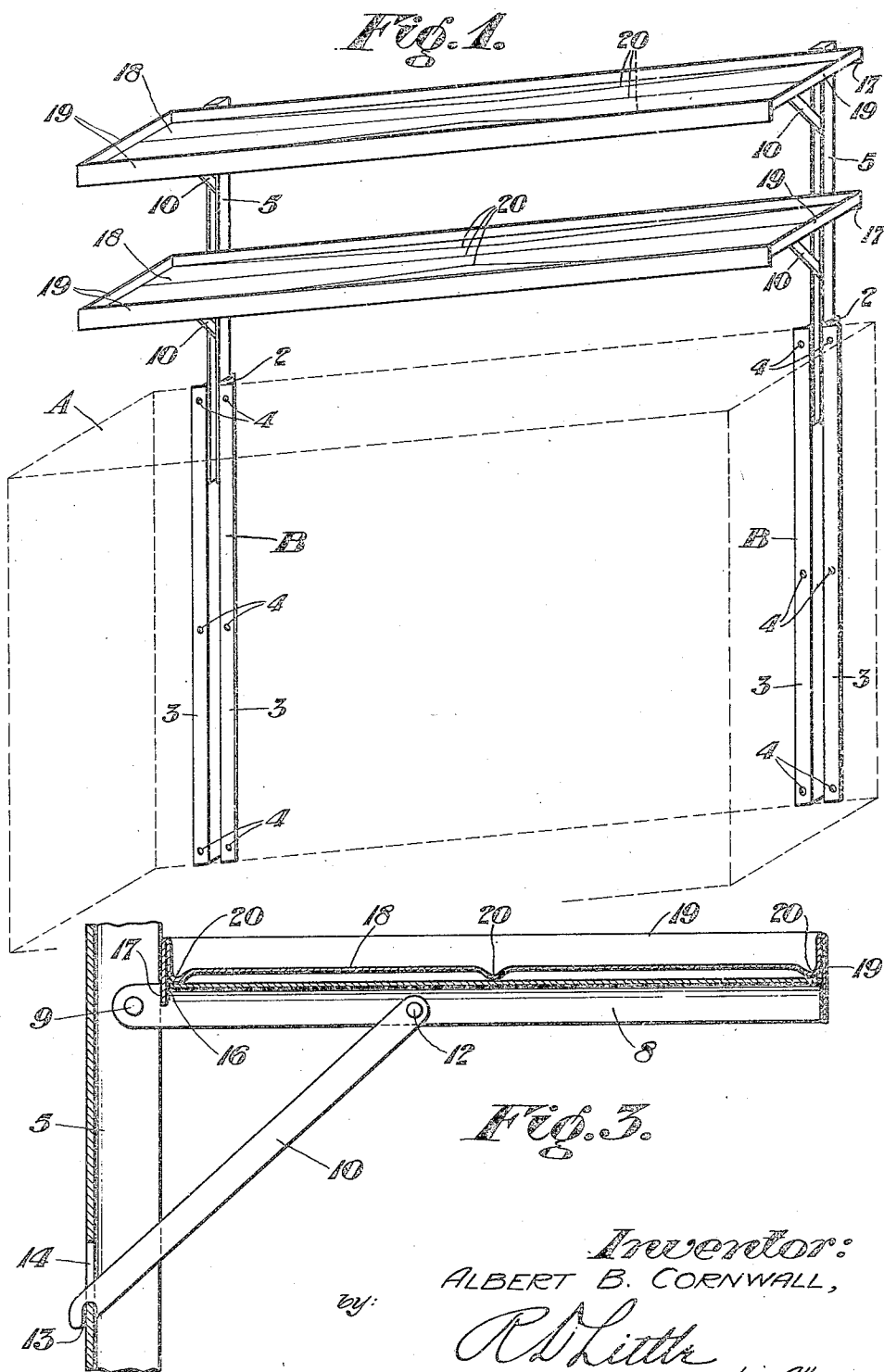
A. B. CORNWALL

1,826,055

SHELVING

Filed April 28, 1930

2 Sheets-Sheet 1



Inventor:
ALBERT B. CORNWALL,

by:

R. D. Little

his Attorney.

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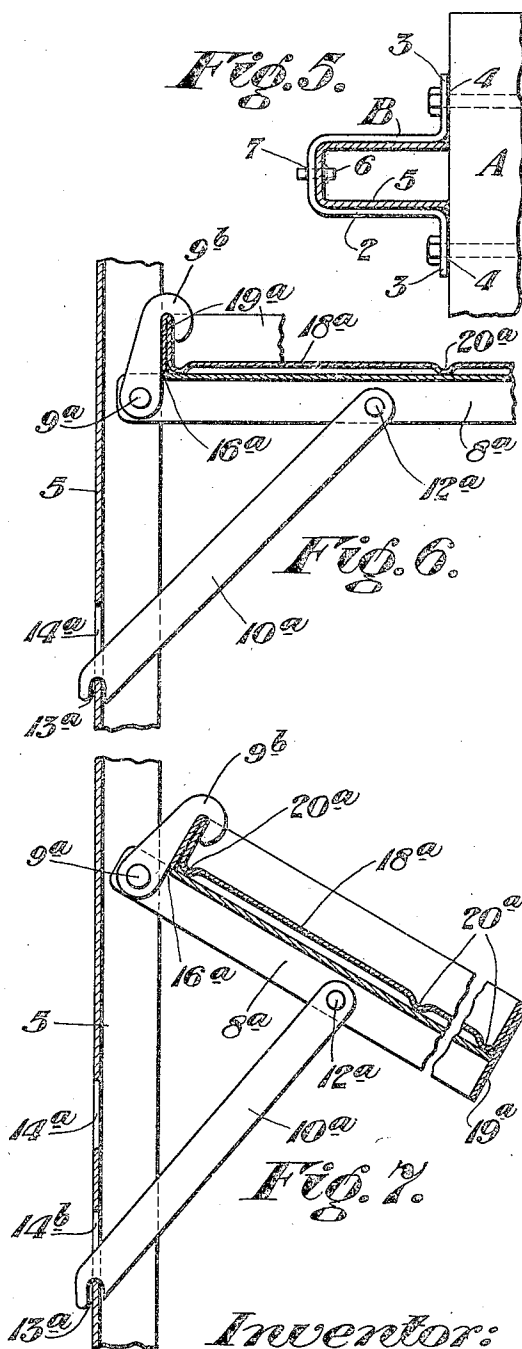
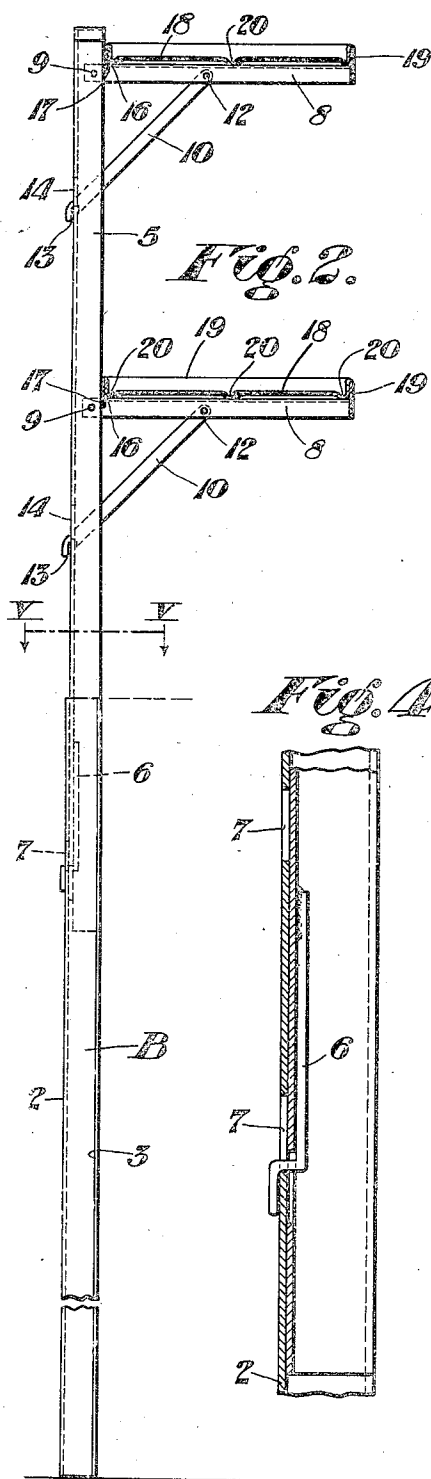
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Inventor:
ALBERT B. CORNWALL,
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UNITED STATES PATENT OFFICE

ALBERT B. CORNWALL, OF PITTSBURGH, PENNSYLVANIA

SHELVING

Application filed April 28, 1930. Serial No. 447,801.

This invention relates to shelving and more particularly to collapsible or knock-down shelving and has for its object the provision of a novel form of shelving which may be attached to the rear of a standard counter, showcase or other store fixture and which may be collapsed out of the way and out of sight when not in use.

Another object is to provide a structure of this class which will be strong and durable yet light in weight.

A further object is to provide a structure of this class which is adjustable to various heights and therefore is of universal application.

In the drawings:

Figure 1 is a perspective view showing the shelf structure as it appears attached to a store fixture.

Figure 2 is a side elevation of one of the upright members.

Figure 3 is an enlarged fragmentary sectional detail showing the details of the shelf bracket assembly.

Figure 4 is a fragmentary detail showing the lock for the inner vertical support.

Figure 5 is a sectional view taken on the line V—V of Figure 2.

Figures 6 and 7 are views similar to Figure 3 of a slightly modified structure.

Referring more particularly to the drawings, the letter A designates the store fixture to which the vertical or upright members B are secured.

Each of the members B comprises a stationary vertical support 2 formed from sheet metal which is bent to form a channel-like member of U-shaped cross-section which has its side walls bent outwardly at right angles to form attaching flanges 3. The flanges 3 are provided with apertures 4 to receive screws, bolts or other means for securing the members 2 in position on the store fixture A.

A second vertical support 5 of the U-shaped cross-section and preferably formed from sheet metal is fitted within the member 2 and adapted to have telescopic movement relative thereto. The member 5 is provided with a spring pressed latch 6 adapted to enter any one of a series of apertures 7 in

the back wall of the member 2 to lock the member 5 in its extended or elevated position.

A pair of vertically spaced shelf supporting brackets are mounted on the support member 5 and each comprises a bracket arm 8 of U-shaped cross-section and preferably formed from sheet metal. The arm 8 is pivotally attached at one end by a pin 9 to the member 5 and is of such width that when it is collapsed it will lie within the confines of the member 5. The bracket arm 8 is adapted to be swung up into horizontal or shelf supporting position and to be held in this position by a diagonal brace 10 which is pivotally secured at one end within the bracket 8 by a pin 12. The free end of the brace 10 is slotted, as at 13, and is adapted to extend through an aperture 14 in the back wall of the support 5 and to have the slot engaged with said wall to lock the bracket in its horizontal or shelf supporting position. When the bracket 8 is collapsed the brace 10 will lie within the confines of the bracket 8 and both the bracket and brace will lie within the confines of the support 5.

The bracket arm 8 is slotted adjacent its rear or pivoted end, as at 16, to receive a downwardly projecting flange 17 on the shelf 18. The shelf 18 is preferably formed from sheet metal and may be stamped or formed up from a single piece of metal. The longitudinal edges are preferably bent upon themselves to form stiffening and article retaining flanges 19, and stiffening beads 20 are also preferably formed in the body portion thereof. The rear flange 19 is extended downwardly below the body of the shelf to form the flange 17 and the front flange 19 is extended downwardly so as to cover the ends of the brackets 8.

In figures 6 and 7 I have shown a slightly modified construction in which the shelf is capable of being supported in either a horizontal or tilted position. In this construction the bracket arms 8^a are pivotally mounted on pins 9^a in the vertical member 5 and have their rear ends slotted to provide clearances for hook members 9^b which also are pivotally mounted on the pins 9^a. Brace 100

members 10^a which are the same as the members 10 previously described, are pivotally secured to the bracket arms 8^a and are adapted to extend through apertures 14^a in the back walls of the supports 5 and to have the slots adjacent their rear ends engaged with said walls to hold the bracket arms 8^a in horizontal position.

Other apertures 14^b are provided in the back walls of the supports 5 at a lower point than the aperture 14^a and the brace members 10^a are adapted to be passed through these second apertures and to be engaged with the back walls to hold the bracket arms 8^a in inclined position.

The shelf 18, used with this modified construction, is the same as the shelf previously described except that the flange 17 is omitted since the hooks 9^b retain the shelf in position.

When the modified construction is used, the shelf 18 will be mounted by sliding it endwise into position so as to engage the rear flange 19 in the hooks 9^b.

It will be understood that the number of shelf supporting brackets may be varied as desired, that the particular shape of the parts and the material from which they are made may be varied to suit the requirements of the trade, and that various other modifications in design and construction may be made without departing from the scope of the invention, as defined in the appended claims.

I claim:

1. In a shelf structure, a vertical support of U-shaped cross-section, said support being adapted to be fixedly mounted on the back of a counter, show-case or other fixed structure so that said structure closes its open side, a second vertical support of U-shaped cross-section telescopically mounted in said first named support and adapted to be moved vertically relative to said first named support, means for locking said second named support in various extended vertical positions, at least one shelf-supporting bracket arm of U-shaped cross-section pivotally mounted in said second named support and adapted to normally lie within the confines of said support and to be swung upwardly into shelf-supporting position, a diagonal brace member pivotally mounted in said bracket arm and adapted to normally lie within the confines of said arm when said arm is collapsed within the confines of said second named support, and means for securing the free end of said brace to said second named support when said bracket arm is moved into horizontal shelf-supporting position.
2. In a shelf structure, a stationary vertical support of U-shaped cross-section, said support having its side walls bent outwardly at right angles to form attaching flanges and being adapted to be fixedly mounted on the back of a counter, show-case or other store

fixture, a second vertical support of U-shaped cross-section telescopically mounted in said first named support and adapted to be moved vertically relative thereto, said first named support being provided with a series of elongated apertures in its rear wall, a spring pressed catch carried by said second named support and adapted to enter the apertures in said first named support when said second named support is extended vertically out of said first named support, at least one shelf-supporting bracket arm of U-shaped cross-section pivotally mounted in said second named support and adapted to normally lie within the confines of said second named support and to be swung upwardly into shelf supporting position, a diagonal brace member pivotally mounted at one end in said bracket arm and adapted to normally lie within the confines of said arm when said arm is collapsed within the confines of said second named support, and means for securing the free end of said diagonal brace to said second named support when said bracket arm and said brace are moved into shelf-supporting position.

In testimony whereof, I have hereunto set my hand.

ALBERT B. CORNWALL.