July 7, 1936. W. C. KENNEY 2,046,824

CRANE AND EXTENSION BRACKET THEREFOR

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Fig. 1

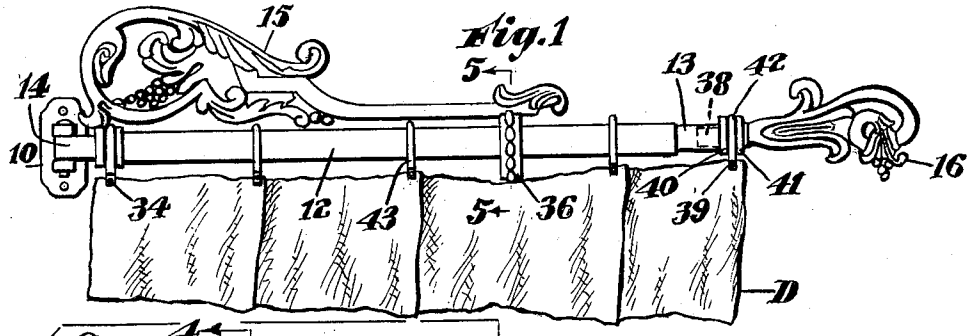


Fig. 2

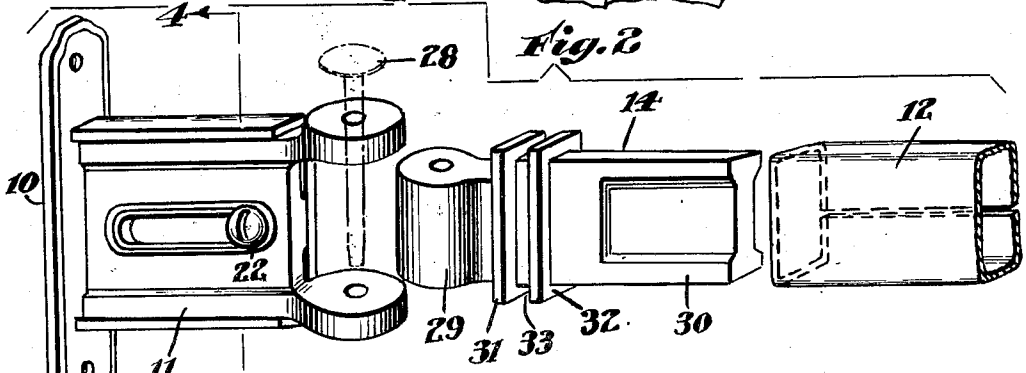
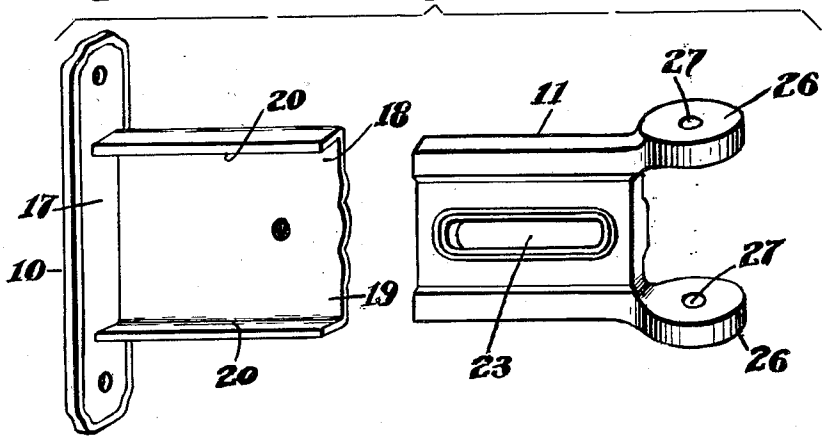


Fig. 3



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Fig. 4

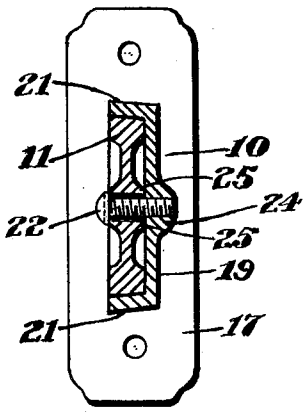


Fig. 5

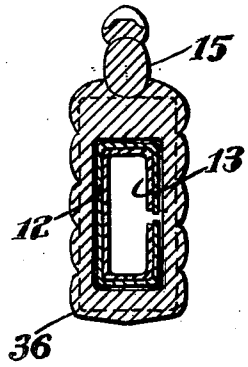
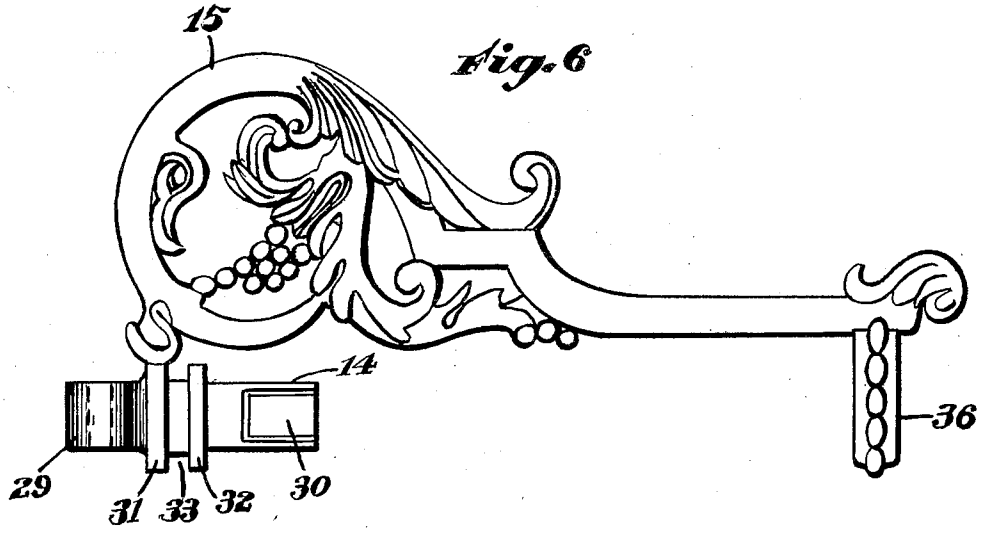


Fig. 6



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UNITED STATES PATENT OFFICE

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CRANE AND EXTENSION BRACKET THEREFOR

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Application October 11, 1934, Serial No. 747,960

11 Claims. (Cl. 156—22)

This invention relates to drapery hardware and particularly to a curtain fixture of the swinging crane type. These fixtures are pivotally mounted at either side of the window casing by means of attaching brackets. Each crane carries a half curtain so that when the cranes are swung towards each other the window opening is thereby curtained.

Heretofore the attaching brackets have usually been fixed. This has prevented any adjustment of the crane arms bodily towards and away from the window. With certain decorative treatments, it is desirable that the crane arms be so mounted as to be capable of a variable projection towards and away from the window, as for example where the decorative treatment requires that a separate and independent curtain rod and curtain be mounted in the space between the crane arms and the window itself.

Accordingly, my present invention in one important aspect contemplates an attaching bracket which will permit a variable projection of the crane arm from the window opening, and at the same time will be strong enough to support the crane arm rigidly in any position of extension.

The entire weight of the swinging crane arm, its decorative ornaments, and the attached drapery, is borne by such bracket, and inasmuch as this weight is applied at a single point and hence the strain is downward, it results that the bracket tends to sag or bend at its point of connection with the crane arm. Inasmuch as such point of connection is also the hinge connection which enables the crane arm to swing horizontally towards and away from the window opening, it results that this point has usually been the weakest point in the crane assembly.

In my invention, however, this weakness is eliminated, despite the fact that in my construction the bracket itself is adjustable to permit the crane arm to be adjusted a limited distance towards and away from the window opening.

These and various other features of advantage and desirability which will appear more fully hereinafter are secured in the device of the present invention.

As illustrative of the principles involved, I show in the accompanying drawings a form of extension crane which I have found highly satisfactory under actual service conditions and well adapted to the requirements of commercial manufacture. In the drawings:—

Fig. 1 is a view of one form of extension crane in accordance with my invention.

Fig. 2 is a fragmentary perspective view thereof.

Fig. 3 is a fragmentary perspective view of the extension bracket and associated parts.

Fig. 4 is an enlarged cross section through said bracket.

Fig. 5 is an enlarged cross section on the line 5—5 of Fig. 1, and

Fig. 6 is a detail view of the decorative ornament at the outer end of the crane shown in Fig. 1, and particularly illustrating the construction whereby the ornament itself becomes a part of the hinge connection between the crane arm and the attaching bracket.

My present crane fixture includes an extensible attaching bracket comprising a combination attaching base and slideway forming member **10** and a slide **11** slidable in the slideway of the member **10**.

The crane arm preferably but not necessarily comprises a pair of tubular arm sections **12** and **13**, of any desired cross section adapted to telescope within one another.

Such arm, whether telescopic or non-telescopic, is pivotally connected at its outer end with the attaching bracket by means of a hinge member **14**, which member where desired may be extended as a decorative ornament **15** (see Figs. 1, 5 and 6) overlying the crane arm.

In order to carry out the decorative effect, an ornament **16** is preferably mounted at or near the inner end of the crane arm, as by inserting the same partially into the inner end of said crane arm.

Referring to Fig. 2, the attachment member **10** of the extension bracket includes a relatively flat attaching base **17**. Extending at right angles from said attaching base **17** is a channeled slideway **18** formed by a continuous web **19**, the longitudinal edges of which are inturned as a pair of spaced horizontally extending guide flanges **20** (see Figs. 2 and 4) adapted to receive the top and bottom edges of the slide **11**.

The slide bears against the web **19**. The top and bottom edges of the slide fit within the flanges **20**. Preferably, but not neecssarily, said flanges **20** are slightly beveled or tapered as indicated at **21** to give a close friction fit.

The adjustment of the slide in the slideway is permitted and held by a screw **22** extending horizontally from the web **19** and having its head disposed in a longitudinal slot **23** in the slide **11**, the web **19** having a threaded boss **24** to receive the inner end of said screw.

Due to the taper fit of the parts the operation

of tightening the screw tends to wedge the slide and slideway together and thus eliminate any tendency of the bracket parts to wabble in use.

Preferably although not necessarily the slide 11 is formed with one or more longitudinal bosses or bearing ribs 25 which not only stiffen it but prevent the slide from becoming bent and distorted and thus destroying the wedging action of the taper-fitted parts.

At its inner end, the slide 11 is formed as a pair of spaced horizontally disposed pintle ears 26 which are pierced as at 27 to receive a rivet 28 or other headed fastening.

The space between said ears 26 accommodates the cylindrical vertically disposed portion 29 at the outer end of the hinge member 14. The portion 29 is apertured to receive the fastening 28.

The inner end of the hinge member 14 is formed as a plug 30 adapted to be inserted into the outer end of the crane arm. Where the crane arm consists of two telescopic members 12 and 13, the plug 30 is inserted into the outer end of the outer member 12.

Between its ends, the hinge member 14 is provided with a restraining formation comprising a pair of spaced shoulders 31 and 32 and an included groove 33. Within said groove is lodged a curtain suspension loop or ring 34. (See Fig. 1.) The shoulder 32 also functions as a limiting stop to limit the penetration of the plug 30 into the adjacent end of the crane arm 12.

Where desired and as shown in Figs. 1 and 6, the hinge member 14 may be extended upwardly as a decorative ornament 15 which overlies the upper edge of the arm section 12, being provided at its inner end with a guide loop 36 (see Fig. 5) through which the crane arm is inserted when assembling the fixture. Such guide loop steadies the assembly and restrains the ornament 15 from wobbling relative to the crane arm.

The inner end of the crane arm may and preferably does also carry a decorative ornament 16. This is frictionally inserted within the inner end of the outer rod member 13 by means of a plug portion 38.

Between said plug and the ornament proper, the insert is formed as a loop or ring retainer for a curtain suspension loop or ring 39. Such retainer includes a pair of spaced shoulders 40 and 41 separated by a groove 42, similar to the shoulders 31 and 32 and groove 33 of the hinge member 14. The suspension loop lies within the groove 42 and is restrained against accidental dislodgment therefrom by said shoulders 40 and 41. Additionally, the shoulder 40 functions as a limiting stop to limit the penetration of the plug part of the ornament into said arm section 13.

Thus the loops 39 and 34 are fixedly anchored at the inner and outer ends of the crane arm thereby maintaining the suspended half curtain or other drapery D taut in any and all positions of the crane arm. The drapery D is suspended between said fixed suspension points 39 and 34 by other loops or rings 43 loosely slidable along the crane arm.

Although I describe my crane arm as consisting of a pair of telescopic arm sections these are only illustrative and the arm may be a solid or non-telescoping member. Similarly with the decorations at the outer and inner ends of the crane. These have been described as of the insert type. Obviously, of course, they may be mounted otherwise. Or the decoration 15 at the outer end of the crane arm may be entirely omitted. Similarly, the loop restraining formations 31, 32, 33 or 40, 41, 42 or either of them may be entirely omitted, if this feature is not desired.

Various other modifications in construction and assembly may obviously be resorted to within the spirit and scope of my invention as defined by the appended claims.

What I therefore claim and desire to secure by Letters Patent is:—

1. A drapery fixture of the swinging arm type, comprising a pair of telescopic arm sections slidable one within the other and constituting an extensible crane arm, an extensible attaching bracket including a fixed member and a member slidable relative thereto, and a hinge connection one end of which is insertable in one of said arm sections and the other end of which is pivotally connected with the slidable member of said extensible bracket.

2. A fixture as claimed in claim 1 wherein said slidable member of the bracket includes a pair of spaced ears and wherein said hinge connection includes a portion adapted to be pivotally fastened between said ears.

3. A fixture as claimed in claim 1 wherein said hinge connection includes a plug portion adapted to be inserted into the outer end of one of said telescopic arm sections.

4. A fixture as claimed in claim 1 wherein said hinge connection includes a plug portion adapted to be inserted into the outer end of one of said telescopic arm sections and a portion adapted to be pivotally fastened to said slidable member of the bracket.

5. A fixture as claimed in claim 1 wherein said hinge connection has at one end thereof a plug portion adapted to be inserted into one end of one of said telescopic arm sections and has at its opposite end a portion adapted to be pivotally fastened to said slidable member of the bracket.

6. A fixture as claimed in claim 1 wherein said hinge connection has at one end thereof a plug portion adapted to be inserted into one end of one of said telescopic arm sections and has at its opposite end a portion adapted to be pivotally fastened to said slidable member of the bracket and wherein said hinge connection intermediate of its ends has a retaining formation for retaining a curtain suspension element against accidental sliding movement along said hinge connection.

7. An extensible bracket for supporting a crane of the swinging arm type, comprising an attaching member having an attaching base and a web extending at right angles therefrom, said web having its longitudinal edges inturned as spaced guide flanges constituting with said web a channeled slideway, a slide adjustable in said slideway and having its inner end formed for pivotal connection with the crane arm, said slide having a longitudinally extending slot, and a headed fastening fixed to said web with its head disposed in said slot for permitting and holding the adjustment of said slide in said slideway.

8. A bracket as claimed in claim 7 wherein the inner end of said slide beyond the inner end of said slideway is formed as a pair of spaced horizontally extending ears.

9. A drapery fixture of the swinging arm type, comprising a crane arm, an extensible bracket including an attaching base and a web extending at right angles therefrom and having its longitudinal edges inturned as spaced guide flanges constituting with said slide a channeled slideway, a

slide adjustable in said slideway and having its inner end formed as a pair of spaced ears, and a hinge connection having one end formed as a portion adapted to be pivotally fastened in the space between said ears and having its opposite end formed for mounting engagement with said crane arm.

10. A fixture as claimed in claim 9 wherein said hinge connection between its ends is formed as a retainer for retaining a curtain suspension element against longitudinally sliding movement along said hinge connection.

11. A drapery fixture of the swinging arm type, comprising a crane arm, an extensible bracket comprising a fixed member and a slidable member for pivotally supporting said arm at its outer end, a hinge connection between said crane arm and the slidable member of said bracket, said hinge connection including a formation for retaining a curtain suspension element against longitudinal sliding movement along said hinge connection, a mounting for a decorative ornament at the inner end of said crane arm, said mounting including a formation for retaining a curtain suspension element against longitudinal sliding movement along said mounting elements, and a curtain suspension element disposed in each of said retaining formations and adapted to suspend a curtain from said crane arm.

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