

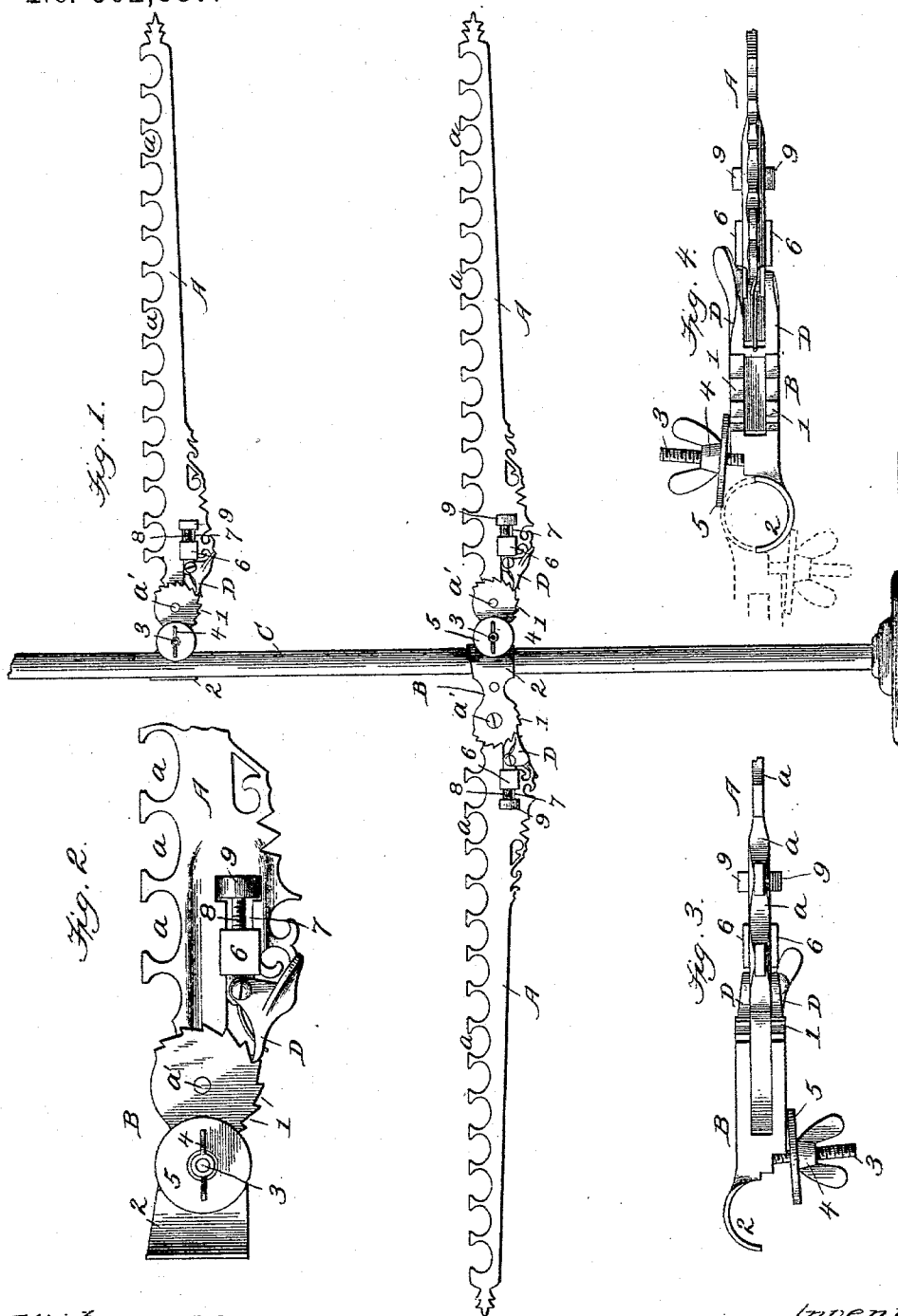
(No Model.)

B. G. CASLER.

ADJUSTABLE BRACKET FOR DISPLAY FIXTURES.

No. 562,887.

Patented June 30, 1896.



Witnesses

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UNITED STATES PATENT OFFICE.

BENJAMIN G. CASLER, OF CLEVELAND, OHIO, ASSIGNOR TO THE CASLER-ALTON COMPANY, OF SAME PLACE.

ADJUSTABLE BRACKET FOR DISPLAY-FIXTURES.

SPECIFICATION forming part of Letters Patent No. 562,887, dated June 30, 1896.

Application filed September 21, 1894. Serial No. 523,746. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN G. CASLER, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Adjustable Brackets for Display-Fixtures; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, wherein—

Figure 1 is an elevation of an upright and three adjustable bracket-arms, two of said arms arranged as a double or front and rear bracket-arm and the third as a single bracket-arm. Fig. 2 is an enlarged detail view of that portion of the bracket-arm and clamp embodying the invention. Fig. 3 is a top plan view of what is shown in side elevation, Fig. 2; and Fig. 4 is a bottom or inverted plan view of the same.

Like symbols refer to like parts wherever they occur.

My invention relates to the construction of the adjustable bracket-arms of display-fixtures for window-trimmers' use, and has for its object to obtain a simple, symmetrical, and strong bracket-arm, which may without change be used as a single bracket-arm, or in duplicate to form a double bracket-arm, and may be adjusted to take up the slack or wear of the ratchet mechanism, or to any desired fractional adjustment between the ratchet-spaces.

The common construction, or, indeed, so far as I am aware, the almost universal construction, of bracket-arms for display-fixtures embraces the well-known divided or sectional sleeve-clamp to clamp the upright, and on which the arm is pivoted, and the pawl-and-ratchet mechanism for the angular adjustment of the arm. As a result, a special and different form of sleeve or clamp is required for a double arm, and the angular adjustment is "step by step," or, in other words, must correspond to the character of the ratchet, whether the same be coarse or fine, and if fine, then the strength and stability of the arm is less and its life shortened.

To obtain a progressive and continuous angular adjustment of the pivoted arm, I combine with the ratchet-and-pawl mechanism or

its equivalent, whereby said angular adjustment of the arm is obtained, means for progressively and continuously advancing or retracting the pivot of the pawl or dog, which, or its equivalent, embodies the main feature of my invention.

There are other, minor, points of invention embodied in particular combinations of elements, and in particular features of construction, all as will hereinafter more fully appear.

I will now proceed to describe my invention more fully, so that others skilled in the art to which it appertains may apply the same.

In the drawings, A indicates the arm of the bracket, which in the present instance is the usual notched arm with a series of undercut notches *a* to retain the shelf-rods, (not shown,) whether the arm be above or below the horizontal line of its pivot; but the particular form of the arm A is immaterial, as in itself it embodies no feature of the present invention.

B indicates the clamp for securing the arm A to the upright C, and in or on said clamp the arm A is pivoted, as at *a'*. That portion of clamp B on which the arm A is pivoted is preferably slotted (see Figs. 3 and 4) to receive the pivoted end of the arm A, and concentric with the pivotal point *a'* is provided with a ratchet or ratchets 1, with which a dog or pawl D, mounted on the arm, engages to effect the angular adjustment of said arm A. That portion of clamp B which engages the upright C is in the form of a half-sleeve (or less) bearing, as at 2, and projecting from the clamp B is a threaded bolt or post 3, on which moves a thumb or binding nut 4, which nut retains a clamping-washer 5, and said washer may, if desired, and preferably is, swiveled on the nut 4, so as to be detachable jointly with nut 4. The threaded post 3 and binding-nut 4 are so located with relation to the half-sleeve bearing 2 that when two such clamps are arranged in the same plane (see dotted and full line, Fig. 4) the half-sleeve bearings are interposed between the upright C and the binding-nuts 4.

Mounted on arm A, preferably on the under side thereof, is a pawl or dog D to engage the ratchet 1, and the fulcrum or pivot of said dog or pawl is by suitable means made adjustable to and from the ratchet a distance

at least equal to the base of each ratchet-tooth, whereby the fractional adjustment (progressively) of the arm is accomplished.

The construction, or means of adjustment, preferred by me is shown in the drawings, that is to say, the dog, which in the present instance is a spring-supported, split or slotted dog or pawl to engage the duplicate ratchets 1 1, is pivoted on a sliding block 6, arranged to move longitudinally of arm A in a slot 7, and is advanced or retracted by feed-screws 8 and rotary nut 9; or, if preferred, the block 6 may be fixed and the screw 8 made movable therethrough and the dog D be pivoted on the movable screw, either of which constructions will effect (on the micrometer principle) the progressive adjustment of the dog D.

The construction being of a general character hereinbefore specified, the arm A is secured to the upright C by applying the half-sleeve section-bearing 2 of clamp B to the upright on one side and screwing down the nut 4 on threaded post 3 until the swiveled washer 5 binds on the opposite side of the upright, after which the arm may be set to any desired angle by first manipulating the pawl-and-ratchet mechanism to get the general angle, and thereafter causing the dog D to advance or recede to secure special or limited adjustment within the width of the particular ratchet-tooth base-line.

In order to employ two single bracket-arms to produce a double bracket-arm, two arms are selected, and so applied to the upright C that the half-sleeve bearings are on opposite sides of the upright, after which the respective thumb-nuts 4 4 are turned down to force the swiveled washers 5 5 to bind on the respective sleeve sections or bearings 2 2 and clamp the whole to the upright C.

Having thus described the nature, operation, and the preferred construction of devices embodying my invention, what I claim, and desire to secure by Letter Patent, is—

1. In a bracket for display-fixtures, the combination with a pivoted arm, of a ratchet, a pivoted dog or pawl, and means for advancing and retracting said dog or pawl independently of said pivoted arm; substantially as and for the purposes specified.

2. In a bracket for display-fixtures, the combination with a pivoted arm, pawl-and-ratchet mechanism for the major adjustment of said arm, of a screw mechanism for advancing or retracting the pawl to obtain the minor or final adjustment of said arm; substantially as and for the purposes specified.

3. In a bracket-arm for display-fixtures the combination of a pivoted arm, a ratchet concentric with the pivot of the arm, a slide longitudinally adjustable on the arm, and a pawl or dog mounted on said adjustable slide, and arranged to engage the ratchet; substantially as and for the purposes specified.

4. In a bracket-arm for display-fixtures, the combination with a pivoted arm, of a ratchet arranged around the pivot of the arm, a slide adjustably mounted on the arm, a screw to actuate and adjust said slide, and a dog or pawl mounted on the slide, and arranged to engage the ratchet; substantially as and for the purposes specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 12th day of September, 1894.

BENJAMIN G. CASLER.

Witnesses:

F. H. BILLMAN,
F. W. RITTER, Jr.