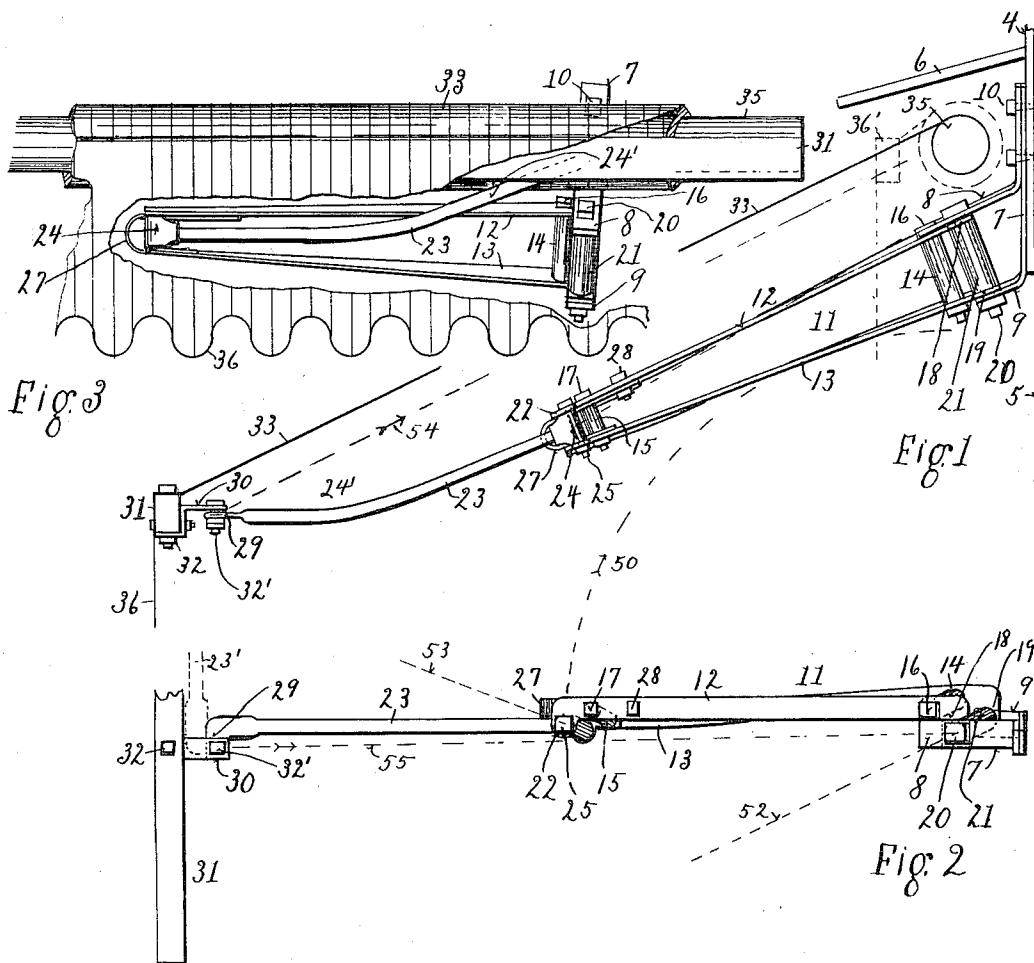


F. A. ANTON.
 AWNING AND ARM THEREFOR.
 APPLICATION FILED NOV. 3, 1909.

986,120.

Patented Mar. 7, 1911.

2 SHEETS—SHEET 1.



Witnesses

C. Rosen

F. A. Buckner

Inventor:

Frederick A. Anton

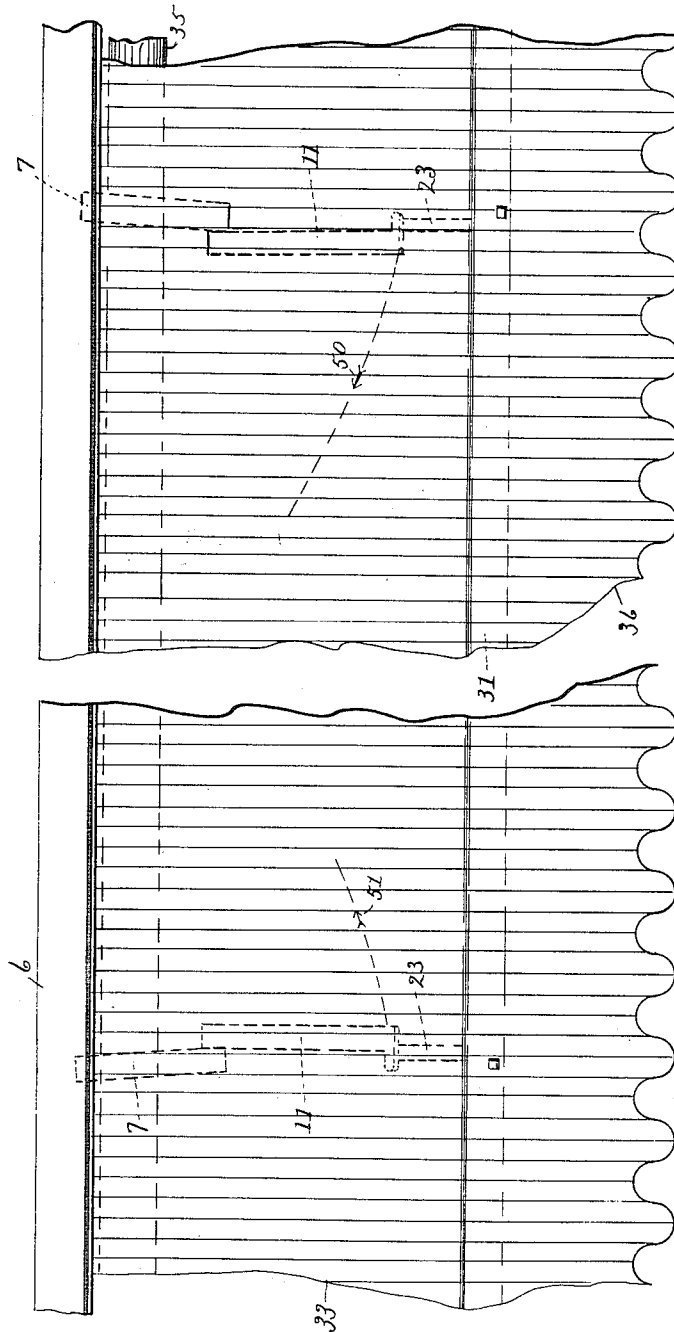
By J. A. Rosen, atty

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F. O. Buckner

Inventor

Fredrick A. Anton
 By *J. A. Kamm* Atty

UNITED STATES PATENT OFFICE.

FREDERICK A. ANTON, OF TOPEKA, KANSAS.

AWNING AND ARM THEREFOR.

986,120.

Specification of Letters Patent.

Patented Mar. 7, 1911.

Application filed November 3, 1909. Serial No. 526,040.

To all whom it may concern:

Be it known that I, FREDERICK A. ANTON, a citizen of the United States, and a resident of Topeka, in the county of Shawnee and State of Kansas, have invented a new and useful Improvement in Awnings and Arms Therefor, of which the following is a specification.

My invention relates to awnings especially of the larger sizes, such as are used for store fronts and the like. Heretofore the supports for such awnings have comprised brackets of various sorts requiring considerable space below the point of attachment of the awning to the building, for supporting the brackets or braces.

It is the object of my invention to improve generally upon the supports for awnings generally, to provide a special arm for supporting the awning, which arm is secured to the building close up to the awning, so as to avoid the usual downwardly extending brackets or frames or braces; to provide an awning arm which may be attached to the building close under the awning and which is foldable when the awning is up and automatically unfolded when the awning is extended; to provide a simple, strong, and efficient foldable arm for supporting the awning; and to provide the parts, improvements, and combinations herein set forth. And my invention comprises, in combination with an awning mounted so as to be rolled at the attached end, a foldable supporting arm which is capable of attachment to the building close under the roller; it also comprises peculiar features of such an arm; and it also consists of the parts, improvements and combinations herein set forth and claimed.

In the drawings accompanying and forming part of this specification, and in the description of the drawings, I have shown and described my invention in its preferred form, and have shown the best mode of applying the principles thereof; but, within the scope of the appended claims, I contemplate changes in form, proportions, and materials, the transposition of parts, and the substitution of equivalent members, without departing from the spirit of my invention.

Figure 1 is an end view of an awning and

arm made in accordance with the principles of my invention, applied to a building, and extended. Fig. 2 is a top view of the awning arm. Fig. 3 is a view from the front, the awning arm being folded. Fig. 4 is a front elevation of the awning extended, parts being broken away, and the arms being indicated by dotted outlines.

Similar reference characters indicate like or corresponding parts throughout the several views.

4 represents the front of a building, such as a store front, with plate glass 5, and a cornice 6; this style of front being now quite extensively used, leaving only the space between the cornice and the top of the plate glass for supporting the awning.

7 is a bracket secured to the front and comprising the two arms 8 and 9 secured by means of lag screws 10. 11 is one section of the awning arm, and may comprise the two stiff strap irons 12 and 13 secured together in proper relation as hereinafter set forth by means of spacers 14 and 15 and bolts 16 and 17. There is an offset at the inner end of this section, as shown at 18, 19, and it is pivoted to the bracket arms in this offset by means of the bolt 20 and spacer 21; and it will be noted that this pivot bolt is inclined from the bottom outwardly toward the top at a considerable angle and from the bottom up laterally at a less marked angle. This section also has a slight offset at its outer end as shown at 22, and in this offset is pivoted the other section 23, which may be a piece of ordinary gas pipe, by means of the T 24 and the bolt 25. And it will be noted that this pivot bolt is inclined outward at substantially the same angle as the pivot bolt 20, and that it is inclined laterally oppositely to the incline of the pivot bolt 20. Secured to the section 11 by means of the spacer 15 and the two bolts 17, 28 is an extension 27 which abuts against the side of the section 23 when the arm is extended and so arranged as to prevent the two sections from turning on this pivot farther than shown in Figs. 1 and 2 but permitting them to be folded on the one side only. The outer end of the section 23 is provided with an offset 29 and is pivoted by bolt 32' to a hinge 30 secured to the awning pole 31, by means of a bolt 32. It will be noted that

the arm folds, as viewed in Fig. 2, by elbowing upwardly as indicated by the line 50; or as it is actually used on the building, inwardly; or, assuming the arm to be located at the right-hand end of the awning, it elbows toward the left. It will also be noted that the pivot 25 is out of line with the pivots 20 and 32', and on that side of the line on which the fold is made, and that the back stop 27 prevents the center pivot from coming to this line, thereby making it always possible to fold the arm by pulling inwardly, toward the building, on the outer end of the arm or on the awning pole. It will also be noted that the head of the bolt 16 abuts against the arm 8, so as to prevent a further swing than that shown in Fig. 2. 33 is the awning proper which extends between the pole 31 and the roller 35, which is suitably mounted above the brackets and under the cornice 6. It may be provided with any suitable means for rotating it, such devices being well known in the art.

There should be two awning arms of the kind herein set forth, and they should be arranged with their respective pivots oppositely inclined and adapted to elbow in opposite directions as indicated by the numerals 50 and 51 in Fig. 4. They are located preferably in from the ends of the awnings, and also preferably elbow inwardly or toward each other; thereby insuring rigidity of the awning, and, when folded being entirely concealed and protected by the cornice and the awning curtain 36. In Fig. 2, I have shown by dotted lines, 52 and 53 respectively, the line to which the upper section tends to swing by reason of the peculiar incline of its pivot, and the line to which the lower section tends to swing by reason of the peculiar incline of its pivot; from which it will be understood that the force of gravity always tends to bring the arm as an entirety to the straight out extended position shown in the full outlines in Figs. 1 and 2; and that the stops described prevent them from buckling on the side on which they are not entitled to fold. On rolling up the awning, the necessary pull in the direction indicated by the lines 54 and 55 will be exerted by the awning on the pole so as to effect the fold of the arms, the arms thereby coming to the position shown in Fig. 3, the pole assuming the position shown in dotted outline 36' in Fig. 1, under the cornice, with the curtain hanging down outside the arms. The outer end 24' of the outer arm 23 is bent so as to lift the awning fabric clear of the arm; that is, so that the canvas will not sag down on the arm when the awning is extended or while being folded. Now, the canvas being rolled, it will be observed that all the pivots tilt outwardly, so that all arms tend by gravity to extend,

they being held in place by locking the roller or by any other means; but on turning the roller forward, the weight of the arms themselves, as well as the added weight of the pole will, by the force of gravity, extend the arms and the awning. It will also be noted that the arm is entirely self-supporting so that when it is extended it is not supported by the canvas, and it thereby relieves the canvas of the strain of such support.

By reason of the offset at the outer end of the outer section, the outer section abuts against the awning pole when the awning is up, which prevents the middle joint from moving outward and locking or binding the awning, and which also insures the outer end of the outer section moving outwardly first so as to prevent such binding. The position taken by the outer arm with relation to the pole is shown in the dotted outline 23' in Fig. 2.

What I claim is:

1. An awning arm comprising two sections pivoted together at their adjacent ends, the other end of the inner section being pivoted to a frame and the other end of the other section being pivoted to an awning pole, the pivots being so disposed that the sections are foldable together laterally, and a stop for stopping the middle pivot from coming in line with the end pivots.

2. An awning arm comprising two sections pivoted together at their adjacent ends, the other end of one section being pivoted to a frame, and the other end of the other section being pivoted to an awning pole, the pivots being so disposed that the sections are foldable together laterally, and the middle pivot being tilted at a lateral angle to the inner end pivot.

3. An awning arm comprising two sections pivoted together at their adjacent ends, the other end of the inner section being pivoted to a frame and the other end of the outer section being pivoted to an awning pole, the pivots being so disposed that the sections are foldable together laterally, the inner end pivot being tilted from the bottom up outwardly and laterally and the middle pivot being tilted laterally oppositely to the inner end pivot.

4. An awning arm comprising two sections pivoted together at their adjacent ends, the inner end of the inner section being pivoted to a frame and the outer end of the outer section being pivoted to an awning pole, the inner end pivot and the middle pivot being disposed at an angle outwardly from the bottom up and being inclined laterally in opposite directions.

5. An awning arm comprising two sections pivoted together at their adjacent ends, the inner end of the inner section be-

ing pivoted to a frame and the outer end of the outer section being pivoted to an awning pole, the inner end pivot and the middle pivot being disposed at an angle outwardly
5 from the bottom up and being inclined laterally in opposite directions, the outward incline being greater than the lateral in-

clines, and the outer end of the outer section being upturned to lift the awning cloth above the arm.

FREDERICK A. ANTON.

Witnesses:

H. W. EULER,

C. J. ROSEN.