J. B. BAKER.

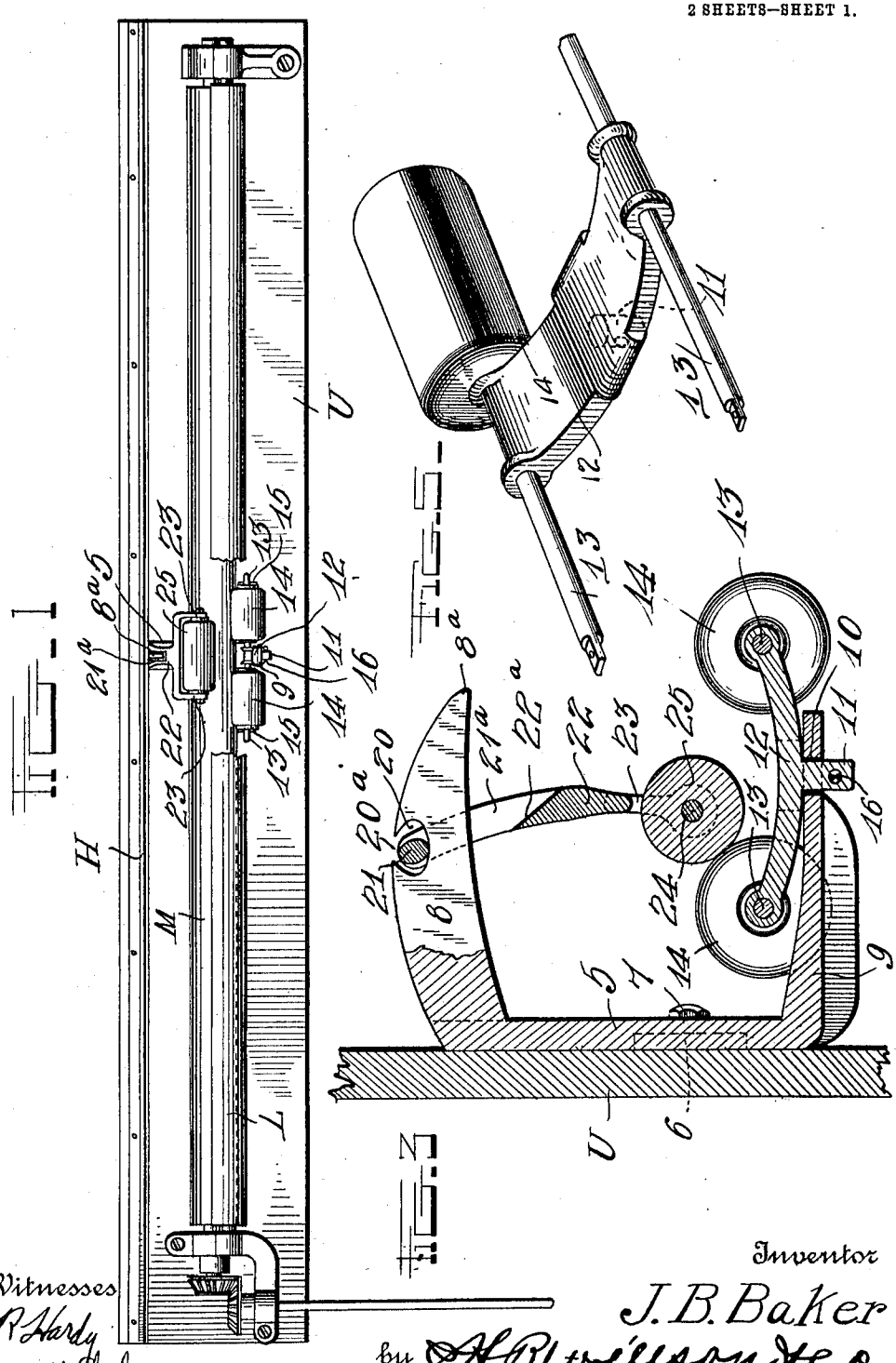
INTERMEDIATE AWNING ROLLER SUPPORT.

APPLICATION FILED OCT. 12, 1911.

1,020,246.

Patented Mar. 12, 1912.

2 SHEETS—SHEET 1.



Witnesses

C. B. Hardy

O. B. Hopkins

Inventor

J. B. Baker

By H. Bliss & Co.

Attorneys

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

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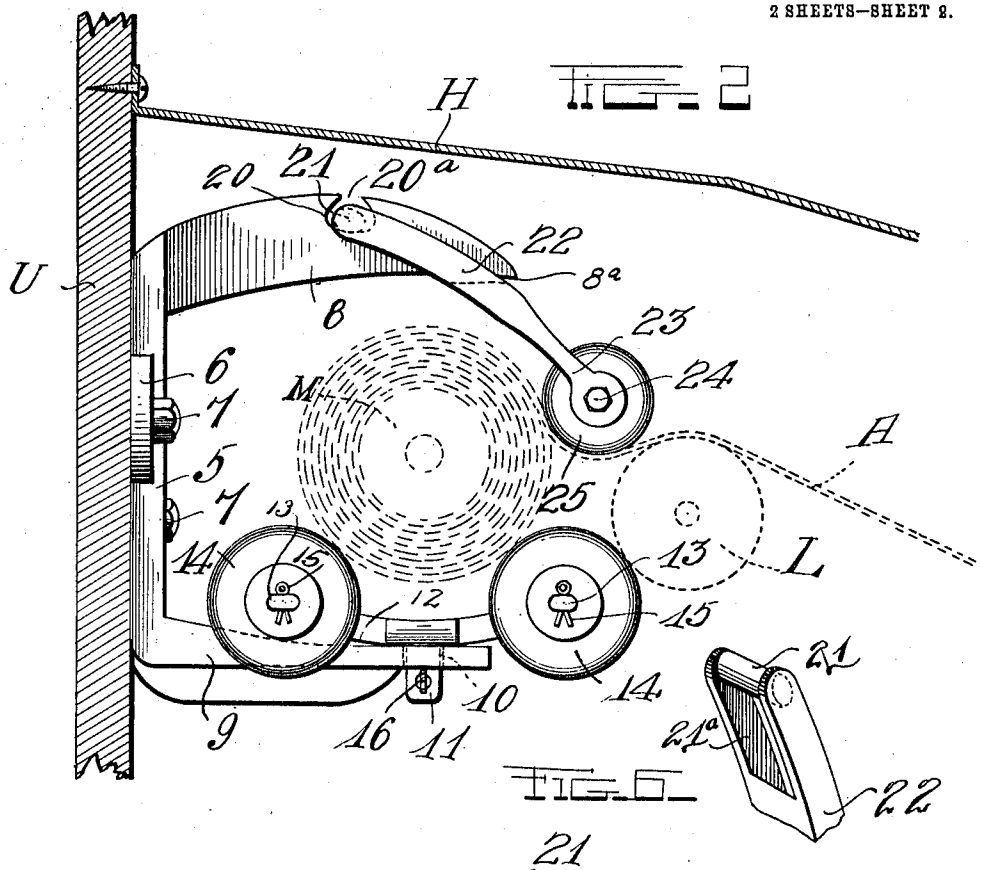

FIG. 2

FIG. 3

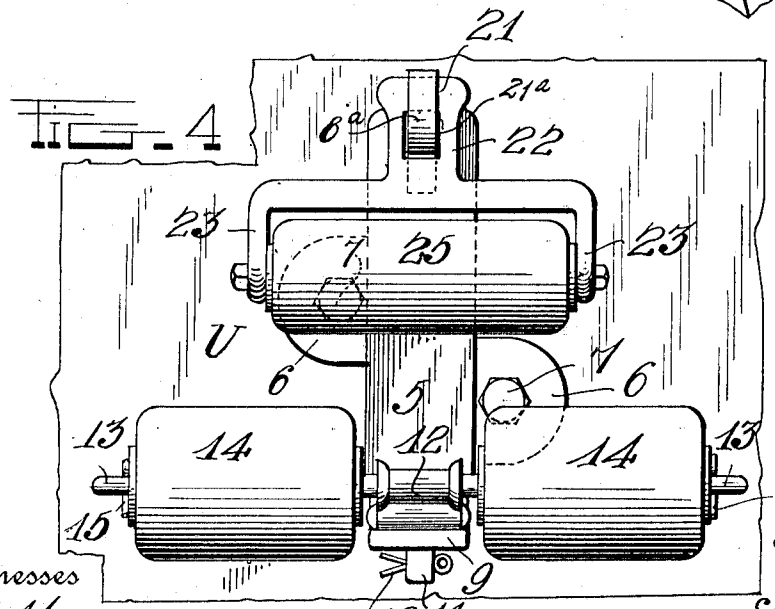

FIG. 4

Witnesses

C. P. Hardy

O. B. Hopkins

Inventor

J. B. Baker

by H. B. Williamson & Co.

Attorneys

UNITED STATES PATENT OFFICE.

JACKSON BERNARD BAKER, OF PORTLAND, OREGON.

INTERMEDIATE AWNING-ROLLER SUPPORT.

1,020,246. Specification of Letters Patent. Patented Mar. 12, 1912.

Application filed October 12, 1911. Serial No. 654,221.

To all whom it may concern:

Be it known that I, JACKSON B. BAKER, a citizen of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Intermediate Awning-Roller Supports; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to awnings, and more especially to the rollers thereof; and one object of the same is to produce a support for the intermediate portion of such rollers whereby the same may be held in alinement with their end bearings and yet be permitted to rotate to draw in or pay out the awning proper.

Another object is to provide a retaining roller for the mid length of the main roller on which the awning is wound, pivotally connected with the casting in such a way that it cannot become displaced until said main roller is pressed to the rear out of its normal and usual position but can then be so easily removed that a single operator can withdraw the main roller and awning.

These and other objects are accomplished by the construction hereinafter more fully described and claimed, and shown in the drawings wherein—

Figure 1 is a front elevation of an awning roller supported in operative position and having my improved supporting attachment applied thereto; Fig. 2 is a side elevation of the support on an enlarged scale; Fig. 3 is a front elevation thereof; Fig. 4 is a vertical transverse section thereof; Fig. 5 is a detail view of the spider and spindles with one lower roller thereon; Fig. 6 is a perspective detail of the tension roller yoke.

In the drawings the letter A designates the awning proper which is wound over the main roller M and extends downward to the lower roller or pole L, although the latter is shown drawn up in Fig. 1; and the letter U designates an upright such as the wall of a building to which this device is attached.

Coming now more particularly to the present invention, the numeral 5 designates a casting having ears 6 through which take screws or bolts 7 into the upright support U for holding the casting in place, and the latter has upper and lower arms 8 and 9 projecting forward from its body portion 5 as shown. The lower arm has an eye 10 in which is journaled a stub-bearing 11 at the lower end of a spider 12 which carries four spindles 13 on which are journaled four rollers 14 of equal size, these rollers being held thereon by split pins 15 or other devices, and the stub shaft being similarly held within the eye 10 as shown at 16. Said rollers 14 are about twice as long as their diameter, and preferably rounded off on their corners as seen in Fig. 2, and by preference these and all other parts of the device are entirely of metal treated with paint or galvanized so as to prevent rusting and prevent injury to the roller and the canvas of the awning itself. The spider 12 is of such size that the four spindles 13 project from it sufficiently far to clear the lower arm 9 of the casting 5 even though the spider may turn slightly on its stub shaft, and the front and rear rollers are spaced from each other as best seen in Fig. 2.

The upper arm 8 of the casting 5 is provided in its upper edge with a transverse notch 20 which is made oval lengthwise of the arm and has a restricted mouth 20^a opening out the top of the arm; and in this notch is loosely engaged the cross bar 21 of a yoke 22 which cross bar is made oval longitudinally of the yoke and stands across the upper end of a slot 21^a therein as best seen in Fig. 6. When the cross bar engages the notch the slot stands astride the arm 8 as seen in Fig. 3 and the longest diameter of the cross bar is in line with the mouth 20^a of the notch so that the entire yoke can be lifted out of engagement therewith; but if the yoke should be swung upward and forward it cannot be disengaged because the length of the slot 21^a from the cross bar 21 to the lower or outer end 22^a of the slot is less than the distance between the notch 20 and the outer extremity 8^a of the arm 8.

The yoke is forked at its lower end, and the arms 23 of the fork are provided with eyes through which passes a pin or bolt 24 on which is mounted a single roller 25 also preferably rounded off a little on its corners and which stands above the space between the lowermost rollers as indicated in Fig. 4 and may be a little longer than any one of them. The length of the yoke from its pivotal point 20 to its pin 24, plus a radius of the roller 25, is such that when the upper or main roller M is not in place

this presser roller 25 can drop down between the upper and lower arms 8 and 9 of the casting 5 and will rest against one of the rear rollers as seen in Fig. 3; but on the other hand when the main roller M is placed within and passes through this device (its extremities being mounted in bearings not shown in this case as they form no part of the present invention) the presser roller 25 is raised as shown in Fig. 2 and rests upon the awning A where it reaches from the main roller M to the lower roller or pole L, and as the former is rotated to wind up the awning the roller 25 acts as a belt tightener and spreads the awning tightly at its center over such roller.

A striking feature of this invention consists in the fact that if the upper or main roller be long or large and heavy or if the workman finds that it sags between its extremities, he can set the casting 5 higher up on the upright or wall U so that the rollers 14 will touch the main roller when the latter is stripped of its awning A; and as the latter accumulates on the roller M the presser roller 25 will rise as will be seen. Obviously the weight of the lower roller L draws down the awning when the main roller is rotated in a reverse direction. Over the whole may be a hood H to cover the main roller and awning when the latter is drawn up and protect it from the elements. When the main roller has once been placed within this device as seen in Fig. 2, it cannot be removed because the end 22^a of the slot 21^a in the fork strikes under the arm 8 as there indicated; but there is an extremely simple way by which it can be removed by one operator. That is to say, first the main roller is pressed back upon the rearmost of the lower rollers 14, so that the yoke may hang pendant as seen in Fig. 3, then this yoke is raised so that the oval cross bar 21 passes out of the mouth 20^a of the notch 20, and then the entire yoke with the upper or presser roller 25 is moved forward so that the slot 21^a passes off the upper arm 8 and this part of the mechanism is entirely disconnected, and thereafter the main roller M can be removed in a manner which will be clear. To restore the parts to their original position, a reversal of this operation is necessary, and it is obvious that the operation can be performed by one person who can thus either remove the upper or main roller or restore it to position.

I do not limit myself to the exact details further than as set forth below, and changes in details may be made without departing from the spirit of my invention.

What is claimed as new is:

1. The herein described intermediate awning roller support comprising a casting secured to an upright and having upper and lower arms whereof the uppermost is notched in its upper edge and the lowermost has a vertical eye, a spider having a depending stub-shaft journaled in said eye and provided with laterally projecting spindles carrying a series of lower rollers spaced from each other, and a yoke whose center is removably mounted in said notch and whose extremities are connected by a bolt carrying an upper roller, a radius of the latter plus the length of said yoke being such that the upper roller may pass above the forward lower rollers and rest against the rearmost lower rollers.

2. The herein described intermediate awning roller support comprising a casting secured to an upright and having upper and lower arms whereof the uppermost is notched in its upper edge, a series of lower rollers carried by the lower arm, and a yoke whose center is removably mounted in said notch and whose extremities are connected by a bolt carrying an upper roller, a radius of the latter plus the length of said yoke being such that the upper roller may pass above the forward lower rollers and rest against the rearmost lower rollers.

3. The herein described intermediate awning roller support comprising a casting secured to an upright and having upper and lower arms whereof the uppermost has in its upper edge a transverse notch with a mouth opening out the top of this arm and of less width than the horizontal diameter of the notch, a series of lower rollers carried by the lower arm, an upper or pressure roller adapted to coact with said lower rollers to retain the main awning roller in place, a yoke having a fork at its lower end between whose arms the pressure roller is journaled, an oval cross bar at its upper end whose longest diameter stands lengthwise of the yoke and whose shortest diameter is less than the width of said mouth, and a slot in its body whose length from its inner end to said cross bar is less than the length of the upper casting-arm from its notch to its outer extremity, for the purpose set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JACKSON BERNARD BAKER.

Witnesses:
C. B. LUCAS,
L. E. TURNBOW.