(No Model.) 2 Sheets—Sheet 1.

C. W. STEBBINS.

WINDOW AWNING FRAME.

No. 446,480. Patented Feb. 17, 1891.

Fig. 1

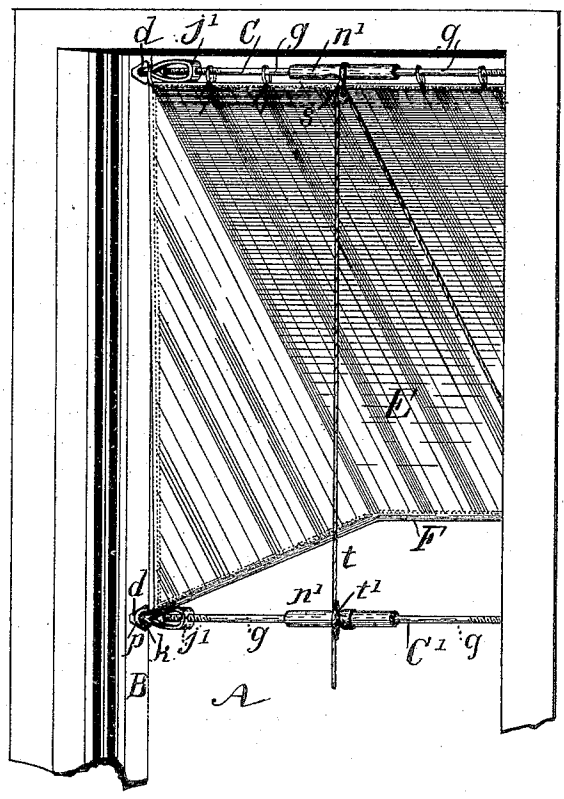


Fig. 2

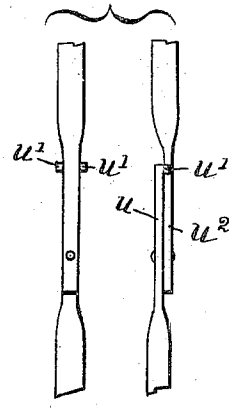


Fig. 7

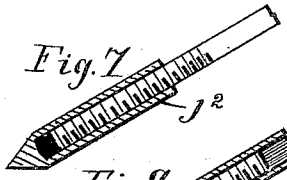


Fig. 8

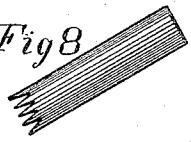


Fig. 9

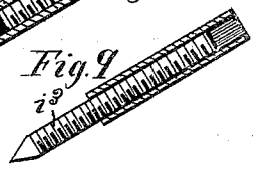


Fig. 3

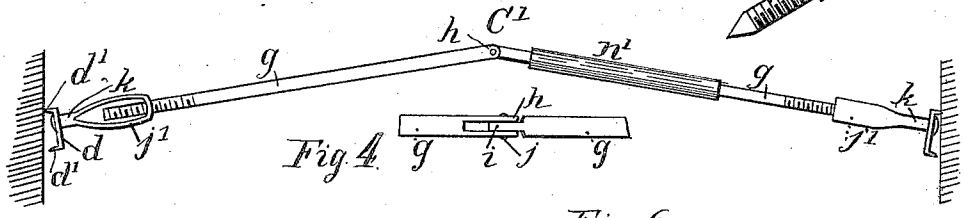


Fig. 4

Fig. 5

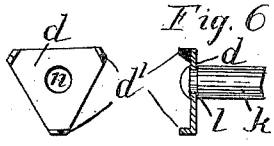


Fig. 6

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Charles W. Stebbins
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

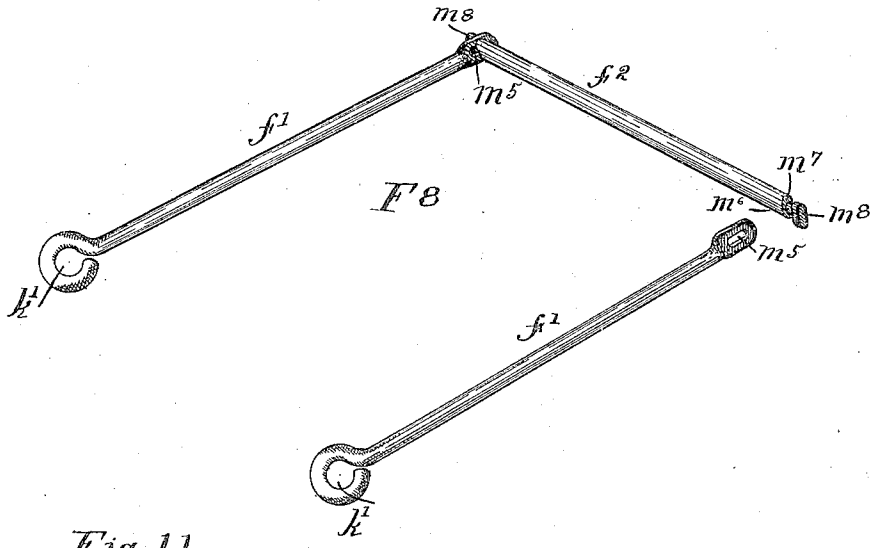
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C. W. STEBBINS.

WINDOW AWNING FRAME.

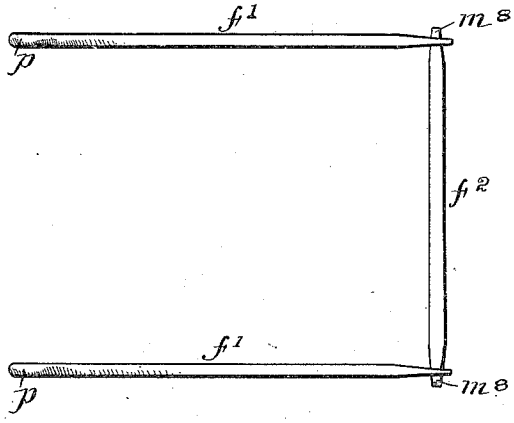
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Fig. 10



F8

Fig. 11



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UNITED STATES PATENT OFFICE.

CHARLES W. STEBBINS, OF NEW HAVEN, CONNECTICUT.

WINDOW-AWNING FRAME.

SPECIFICATION forming part of Letters Patent No. 446,480, dated February 17, 1891.

Application filed July 3, 1890. Serial No. 357,622. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. STEBBINS, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Window-Awning Frames, of which the following is a specification.

My invention relates to window-awnings, and has for its object to provide a light, strong, and simple awning-frame adapted to be readily adjusted to windows of various widths and easily mounted and secured in place upon the window-jamb without fastening permanent fixtures thereto or inserting screws or staples therein, and which may be quickly unfastened and removed from the building and conveniently taken apart and packed for transportation.

The invention consists in the novel toggle-joint construction of the fastening-rods and combination therewith of their retaining, adjusting, and joint-securing devices, and in the novel construction of the awning-hoop, as hereinafter more fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of my improved awning shown mounted in place over a window and viewed from the interior of the building. Fig. 2 shows a modification of the toggle-joint of the fastening-rod. Fig. 3 is a view of one of the fastening-rods detached and with the toggle-sections swung out of alignment, illustrating the mode of applying and removing the rods. Fig. 4 is a plan view of the joint shown in Fig. 3, and Fig. 5 is a face view of a holding-plate. Fig. 6 is a central section through a holding-plate, and Figs. 7, 8, and 9 are modifications. Fig. 10 is a perspective view of the detachable awning-hoop, and Fig. 11 is a plan view of the same.

Referring to the drawings, A designates an ordinary window-opening viewed from the interior, and B represents the jamb or vertical side of the window-opening exterior to the window-casing. Extending across between the jambs are two horizontal fastening-rods C C′, for supporting the awning E, and which are held in place by means of suitable holding-plates *d*, arranged at the ends thereof and provided with spurs or bent-over points *d′*, adapted to be embedded in the jamb of the window-opening, in the manner hereinafter described. The upper fastening-rod C is placed near the top of the window and supports the awning at the top, while the lower fastening-rod C′ is secured across at the foot of the awning and forms the pivotal center or journals on which the awning-hoop F is hinged and adapted to swing. The said fastening-rods are each composed of two main rods or toggle-sections *g*, which are hinged together by means of a common hinge-joint, one of the sections having a pair of ears *h* and the other a tongue *i* received between the said ears and held in place by a pin or pivot *j*, upon which the parts are adapted to swing with reference to each other. The opposite end of each section is threaded and screwed into the end of a link-shaped piece or open sided sleeve *j′*, the end of the sleeve being suitably perforated and threaded to conform to the thread of the rod. At the opposite end each sleeve terminates in a rounded part or journal *k*, which is reduced in size at the end to form a shoulder *l* and firmly riveted into its aforesaid corresponding end plate *d*, the plate being formed with a central perforation *n* to receive the reduced part of the journal. By means of this construction of the sleeves they may be screwed onto the toggle-sections to any required distance necessary for adjusting the lengths of the fastening-rods to fit windows of various widths, as the clearance-space in the sleeves allows the rods to enter them to any depth required. A locking-sleeve *n′* is loosely fitted upon each fastening-rod between the sleeves *j′* and adapted to be moved over the joint thereof to hold the separate toggle-sections in alignment with each other when in use. The ends of the awning-hoop F are bent to form circular eyes *p*, which are received on the journals *k* of the lower fastening-rod and turn thereon as the hoop is swung to raise or lower the awning. The eyes of the hook are made sufficiently large to permit the play of the journals *k* therein as the toggle-sections are bent out of alignment into the position shown in Fig. 3. The foot or lower edge of the awning E is hemmed to the said hoop, and the upper edge of the awning is secured to the upper fastening-rod by means of suitable cord-loops *r* or metal rings

passing through the edge of the awning and around the rod, as shown.

In the operation and application of my improved awning-frame the length of the fastening-rods may be adjusted to slightly exceed the width of the space between the window-jambs, and then by bending the rods at the joints, and thereby throwing the separate toggle-sections out of alignment, the distance between the ends of the fastening-rods will be lessened, and they will then readily enter crosswise between the jambs, as shown in Fig. 3. Then if the rods are straightened by pressing the toggle-sections into alignment with each other the points or spurs of the holding-plates d will be forced against the jambs with great pressure and embedded therein, thus securing the rods firmly at their ends, and by sliding the locking-sleeves n' over the joints of the rods they will be held straight, and thereby prevented from buckling, and will remain fastened across the window-opening as firmly and rigidly fixed as if they were entire straight braces having their ends inserted in the jambs; but the fastening-rods may be quickly removed and the awning easily taken down by slipping the locking-sleeves n' off from over the joint, and then bending the toggle-sections out of alignment.

An ordinary awning-hoop consisting of a U-shaped rod of the usual construction may be used with this improved awning-frame; but as such hoops are inconvenient in transportation I have devised a hoop F^8, having its three straight portions made up of separate sections f' f^2, which are detachably connected at the corners of the awning, as shown in Figs. 10 and 11. The side sections f' are straight rods bent to form the eyes k', and at their opposite ends are each flattened and formed with an eye or slot m^5, passing horizontally through the said flat portion of the rod. The cross-section f^2 is a straight rod provided at each end with a neck m^6, shoulder m^7, and oblong head m^8, which corresponds to and is adapted to pass through the eye m^5 in the section f'. These heads may readily be inserted through the said eyes m^5, and then if the cross-rod is turned to bring the said heads at right angles to the eyes the several sections will be securely connected together, but may be easily taken apart when it is desired to fold the awning compactly for transportation. A pulley block and sheave s is strapped to the locking-sleeve on the upper fastening-rod C, and a cord t is centrally fastened to the hoop F and led up over the said sheave, with its end hanging down in convenient position to be grasped to raise or lower the awning. A belaying-cleat t', or other suitable device for securing a cord, is attached to the locking-sleeve of the lower fastening-rod for the purpose of fastening the cord t with the awning elevated to any required position, thus wholly dispensing with permanent fixtures upon the window jamb or casing.

If desired, the toggle-sections may be jointed together by simply flattening their ends, as shown in Fig. 2, and riveting them together, one of the said flattened parts u being projected considerably beyond the pivot-rivet and provided with two upturned lugs u', which are adapted to "straddle" the flattened part u^2 of the other rod, and thus hold the rods in alignment without the use of the locking-sleeve, the parts being adapted to spring sufficiently to permit the part u^2 to pass over the lugs u' as the rod is applied or removed; but the use of locking-sleeves to hold the rods firmly in place is the preferable construction.

If desired, the sleeves j' may be made of short pieces of tubing j^2, contracted slightly and internally threaded at one end and pointed at the other, as shown in Fig. 7, or simply serrated, as shown in Fig. 8, any of the said constructions being adapted to insure a firm hold on the jamb when pressed therein by the powerful action of the toggle-joint.

If preferred, the toggle-rods g may consist of tubes, into which suitable pointed end pieces may be screwed, as shown in Fig. 9.

This improved awning-frame is of simple and strong construction, admits of being easily mounted over a window and instantly taken down, and can be applied to windows of various widths by simply adjusting the sleeves on the rod to bring them to the required length.

I claim—

1. In a window-awning frame, the combination of the upper and lower fastening-rods adapted to extend horizontally across the window-opening, each comprising a pair of rods or sections hinged together to form a "toggle-joint" and provided with holding points or spurs at their ends for engaging the jambs, an awning-hoop hinged or pivotally connected to the lower rod, and an awning attached to the said hoop and upper fastening-rod.

2. In awnings for windows, the combination of the upper and lower fastening-rods adapted to extend horizontally across the window-opening, each comprising a pair of rods or sections hinged together to form a toggle-joint and provided with longitudinally-adjustable holding-pieces at their ends having points or spurs for engaging the jambs, an awning-hoop hinged or pivotally connected to the lower rod, and an awning attached to the said hoop and upper fastening-rod.

3. In a window-awning, the combination of the upper and lower fastening-rods adapted to extend horizontally across the window-opening, each made up of a pair of rods or toggle-sections hinged together to form a toggle-joint, the holding-pieces screwed on the ends of the rods, and thereby adapted to be longitudinally adjusted thereon and provided with the holding points or spurs for engaging the jambs, the locking-sleeves fitted upon the rods and adapted to be moved over the joints thereof to hold the toggle-sections securely in alignment, an awning-hoop hinged

on the lower rod, and an awning secured to the said hoop and upper fastening-rod.

4. In a window-awning, the combination of the upper and lower fastening-rods adapted to extend horizontally across the window-opening, each made up of a pair of rods or toggle-sections hinged together to form a toggle-joint, the holding-pieces screwed on the ends of the rods and thereby adapted to be longitudinally adjusted thereon and having the holding points or spurs for engaging the jambs, locking means for securing the toggle-joint with its sections in alignment and preventing buckling action thereof, an awning-hoop made up of the side sections f', hinged to the lower fastening-rod, the separate transverse sections f^2, coupled or detachably connected to the ends of the side sections, and an awning secured to the said hoop and the upper fastening-rod, substantially as specified.

5. In a window-awning, the combination of the upper and lower fastening-rods adapted to extend horizontally across the window-opening, each made up of the toggle-sections $g\ g$, hinged together and screw-threaded at their outer ends, the sleeves $j'\ j'$, screwed upon the rods, the holding-plates $d\ d$, attached to the outer ends of the sleeves and provided with the jamb-engaging spurs d', the locking-sleeves n', adapted to cover and lock the toggle-joints of the rods, an awning-hoop hinged on the lower rod, and an awning attached to the upper fastening-rod and the said awning-hoop, substantially in the manner and for the purpose specified.

CHARLES W. STEBBINS.

Witnesses:
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F. G. HAYNES.