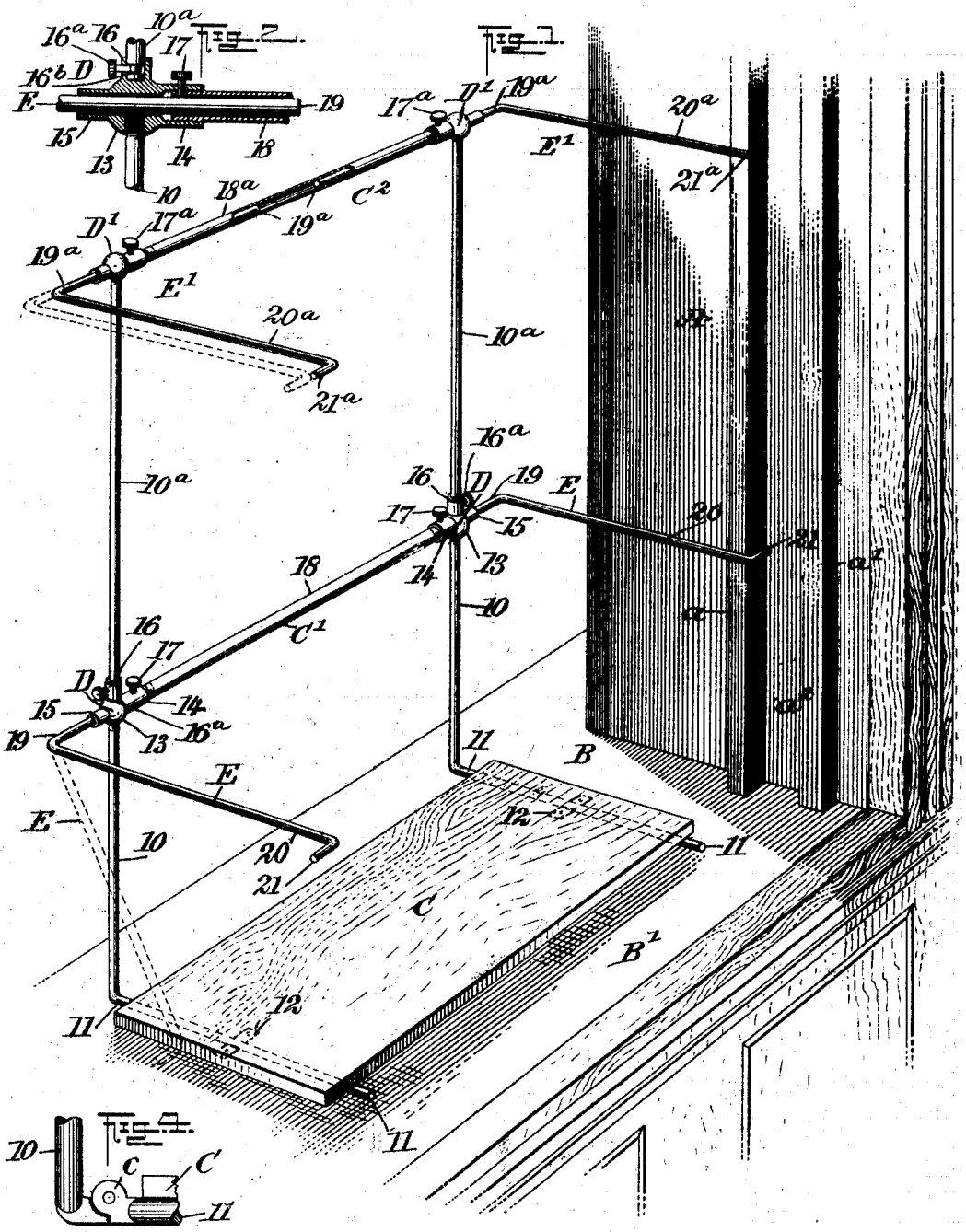
No. 764,463. PATENTED JULY 5, 1904.

H. HARRISON.

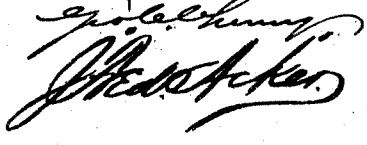
WINDOW CLEANING CHAIR.

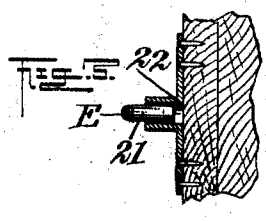
APPLICATION FILED DEC. 15, 1903.

NO MODEL.



WITNESSES:





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No. 764,463. Patented July 5, 1904.

UNITED STATES PATENT OFFICE.

HERMAN HARRISON, OF NEW YORK, N. Y.

WINDOW-CLEANING CHAIR.

SPECIFICATION forming part of Letters Patent No. 764,463, dated July 5, 1904.

Application filed December 15, 1903. Serial No. 185,245. (No model.)

To all whom it may concern:

Be it known that I, HERMAN HARRISON, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Window-Cleaning Chair, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a window-cleaning chair of simple, durable, light, and economic construction capable of being expeditiously and conveniently applied and fastened to windows of different widths and as conveniently removed.

Another purpose of the invention is to provide a window-cleaning chair which will constitute a safe and firm window-seat and which will guard the occupant at the back and sides, whether the occupant be sitting or standing.

Another purpose of the invention is to so construct the device that when not in use it will occupy but a minimum of space.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a portion of a window-frame and a perspective view of the device applied to the frame, a portion of the device being in section. Fig. 2 is an enlarged sectional view of a corner portion of the guard-section of the device. Fig. 3 is a vertical section through a portion of the window-frame and the socket adapted to receive the inner terminal of a side guard of the device, and Fig. 4 is a detail view illustrating the manner in which the standards for the seat may be hinged.

A represents a window-frame, B the outer sill thereof, and B′ the inner sill. The improved window-cleaning chair consists practically of two parts—namely, a seat-section C and a guard-section C′.

The seat C may be made of any suitable material, wood being ordinarily used, and the said seat is generally in the form of a board of greater length than width. In connection with the seat C uprights 10 are employed located at the rear or outer longitudinal edge of the seat. Each upright 10 is threaded at its upper end and at its lower end is provided with a horizontal member 11. These horizontal or foot members 11 of the standards 10 are either securely fastened to the seat C at its under face or are removably connected therewith. Usually, however, the foot members 11 of the standards 10 are secured to the under face of the seat C by means of straps 12. (Shown by dotted lines in Fig. 1.)

With reference to the guard-section C′ of the device horizontal tubular heads D are employed in connection with the upper end of each standard 10. These horizontal tubular heads D are preferably provided with a circular enlargement 13 between their ends, and the inner ends 14 of the tubular heads D are interiorly threaded and are of greater diameter than the outer ends 15, the bore at the central or enlarged portion of each tubular head and at the outer end portion 15 thereof being plain or smooth, as is shown in Fig. 2. Further, in the construction of each tubular head D a socket 16 is formed at the upper portion of the enlargement 13, and the said sockets 16 are provided with set-screws 16^a. Furthermore, a set-screw 17 is located at the enlarged inner end 14 of each tubular head.

The ends of a connecting-tube 18 are secured in the inner portions 14 of the said tubular heads D and connect said heads, and in connection with the said tubular heads and the tubular connecting member 18 two side guards E are employed, each side guard comprising a rear member 19 and an inwardly-extending member 20 at an angle to the rear member 19. The inwardly-extending member 20 of each side guard E is provided with an outwardly-extending terminal member 21 at an angle to the inwardly-extending member 20, as is clearly shown in Fig. 1.

The rear members 19 of the side guards E are passed through the bores of the tubular heads D from the outer ends of said heads, so that the side sections or guards E may be carried inward or outward, so as to bring their inwardly-extending members 20 in close prox-

imity to the sides of the window-frame in connection with which the chair is to be used, thus adapting the chair for use in connection with window-frames of different widths, and after the side members or side guards have been properly adjusted the set-screws 17, which pass through the inner end portions of the tubular heads D and likewise through the connecting-tubes 18, are turned downward until they firmly engage with the rear members 19 of the said side guards.

In applying the chair to a window-frame the terminal members 21 of the side guards E are made to engage usually with the inner vertical face of the outer stop-beads a for the sash-grooves a^2, in which the upper sash travels, or the said terminal members 21 of the guards E may be made to engage with the inner faces of the inner stop-beads a', forming the inner wall of the said outer sash-groove a^2. This form of attachment enables the chair to be attached to any window; but if it is desired the sides of the window-frame may be provided with sockets 22, formed upon metal plates secured to the window-frame by screws or their equivalents, as is shown in Fig. 3, and these sockets 22 receive the terminal members 21 of the side guards E of the device.

The guards above described are sufficient to protect the sides of a person when seated in the chair; but it is frequently desirable that the person should stand in the chair in order to reach the upper portions of high windows or to reach the upper portions of the window-frame. Therefore in addition to the structure above set forth I employ an additional guard C^2, and such additional guard consists of standards 10^a, which fit into the sockets 16, extending upward from the tubular heads D, and are provided with annular grooves 16^b to receive the set-screws 16^a. In connection with each standard 10^a I employ a tubular head D', identical in construction to the horizontal tubular heads D of the main guard C', except that the upper sockets 16 are dispensed with. The upper tubular heads D' are connected by a tube 18^a, and set-screws 17^a are passed through the tubular heads and through the connecting-tube 18^a. The side guards E' are identical with the lower side guards E, comprising rear members 19^a, which slide in the tubular heads D' and in the connecting-tube 18^a, being held in adjusted position by the set-screws 17^a, and forwardly-extending outer members 20^a, together with terminal members 21^a, extending laterally in an outward direction from the intermediate members 20^a. The terminals 21^a of the upper guard C^2 are secured to the window-frame in the same manner as are the terminal members 21 of the lower guard C'.

When the chair is not in use, the upper main guard C^2 is removed and the side guards E, constituting portions of the lower main guard C', are dropped to the dotted position shown in Fig. 1, enabling the chair to be placed in a small compass; but if it is desirable the standards 10 may have hinged connections c with their foot members 11, the hinges being such as to enable the lower main guard to fold down over the seat C, but support the standards 10 in an upright position, as is shown in Fig. 4.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a window-cleaning chair, a seat, standards extending upwardly from the rear edge portion of the seat, horizontal tubular heads attached to the standards, said heads having central enlargements and enlarged inner ends, a tubular rear guard connecting said enlarged inner ends of the tubular heads, said enlarged inwardly-extending portions having their openings enlarged at their inner ends to receive said rear guard, angular side guards adjustable in said heads and the rear guard, locking devices for the side guards, carried by the heads and rear guard, and retaining members constituting outer terminal portions of the side guards.

2. A window-cleaning chair consisting of a seat, standards extending upward from the rear portion of the seat, horizontal tubular heads attached to the standards, said heads having central enlargements, the portions of said heads extending inwardly from said enlargements being larger than the portions extending outwardly therefrom, said enlarged inwardly-extending portions having their openings enlarged at their inner ends, a tube connecting the inner ends of the tubular heads, said enlargements being of a size to receive the outer diameter of said tube, and the inner diameter of said tube being of equal size with the remainder of the bore through said head, set-screws passed through the inner portions of the tubular heads and through the connecting-tube, and angular side guards adjustable in the tubular heads and their connecting-tube, each side guard comprising a back member slidably mounted in the said tubular head and connecting-tube, a forwardly-extending member at an angle to the rear member, and a terminal member extending outward at an angle to the intermediate member, all combined for operation as described.

3. A window-cleaning chair consisting of a seat, standards extending upwardly from the rear portion of the seat, horizontal tubular heads attached to the standards, said heads having central enlargements provided with a bore on their under sides into which the upper ends of said upwardly-extending standards are received, and on their upper sides with upwardly-extending tubular extensions for the reception of additional standards, the portions of said horizontal heads extending inwardly from said enlargements being larger than the portions extending outwardly therefrom, said enlarged inwardly-extending por-

tions having enlarged internal threaded bores at their ends, a tube connecting the enlarged inner ends of the tubular heads, auxiliary standards removably attached to said upward extensions of the horizontal heads on the guard-rails, a second rear guard-rail connecting the latter-named standards, and side guard-rails adjustable in the upper rear guard-rail, having retaining members at their inner ends, and locking devices for the upper side guard-rails.

4. In a window-cleaning chair, a seat, standards extending upwardly from the rear edge portion of the seat, horizontal tubular heads attached to the standards, a tubular rear guard connecting the inner ends of said heads, said heads having their openings enlarged at their inner ends to receive said rear guard, and angular side guards adjustable in said heads and the rear guard, said side guards having retaining members at their outer ends, and locking devices for the side guards and rear guard.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HERMAN HARRISON.

Witnesses:
J. FRED. ACKER,
JNO. M. RITTER.