

A. BISCHOFF.
Guard-Railings for Windows.

No. 223,105.

Patented Dec. 30, 1879.

Fig: 1.

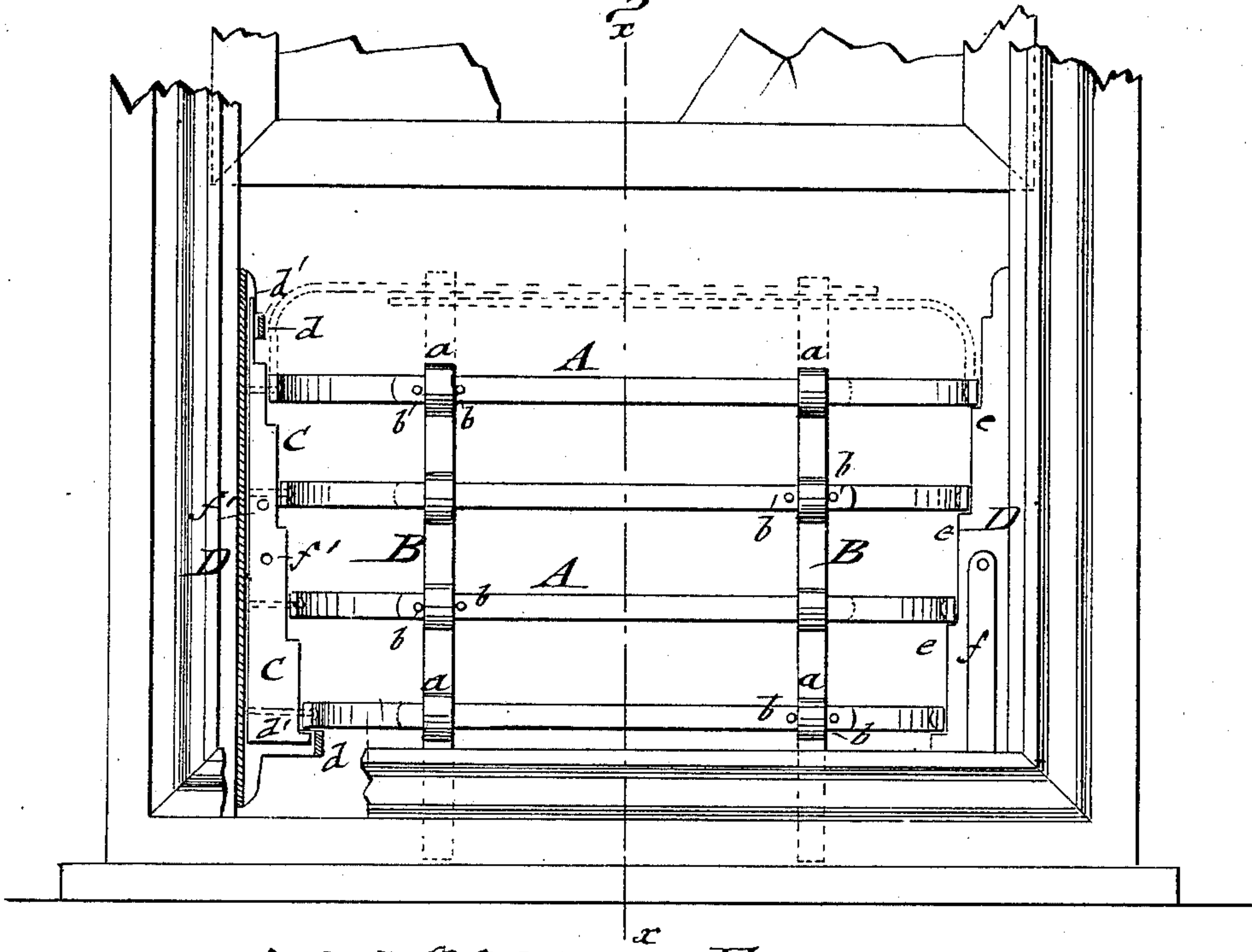
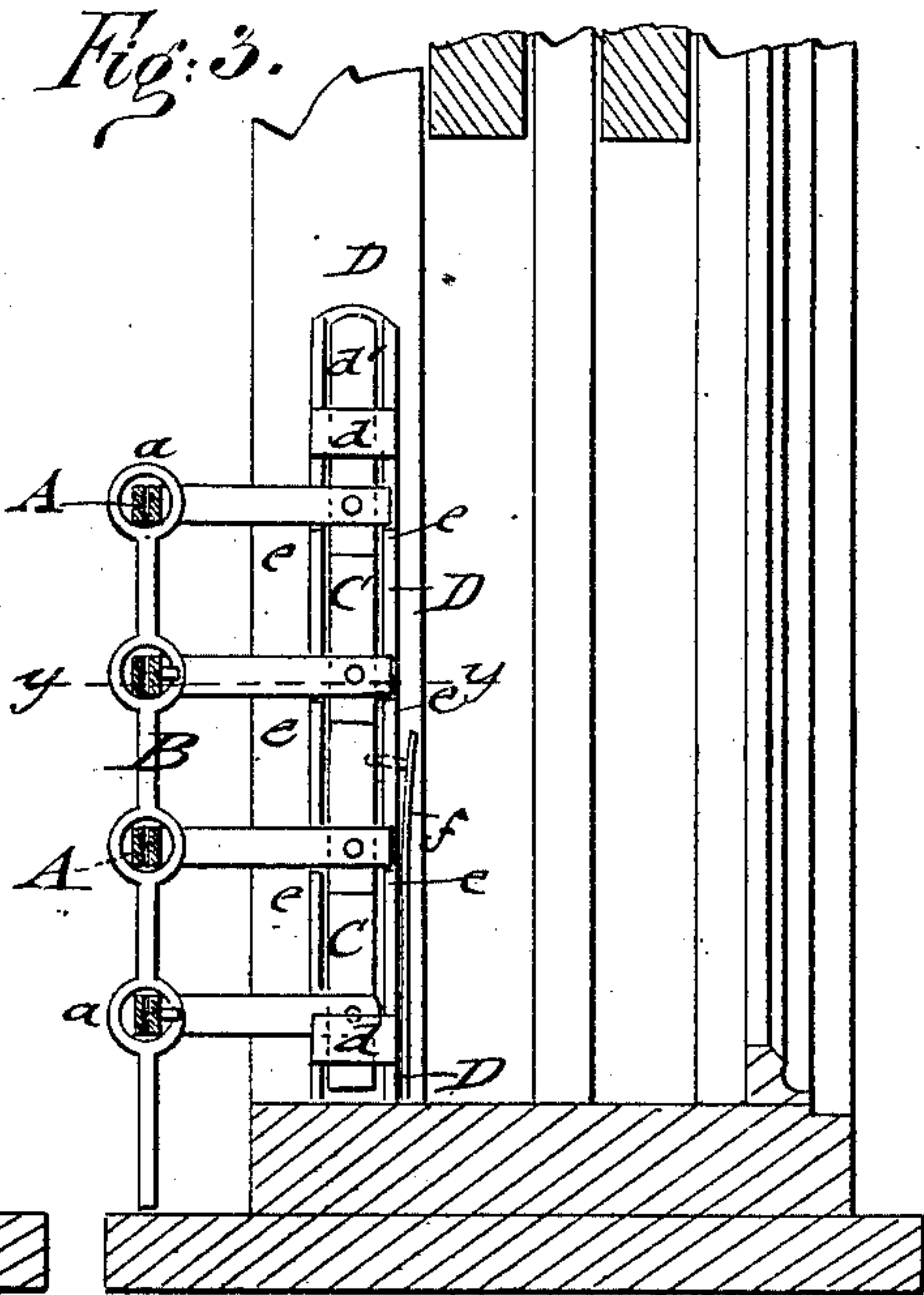
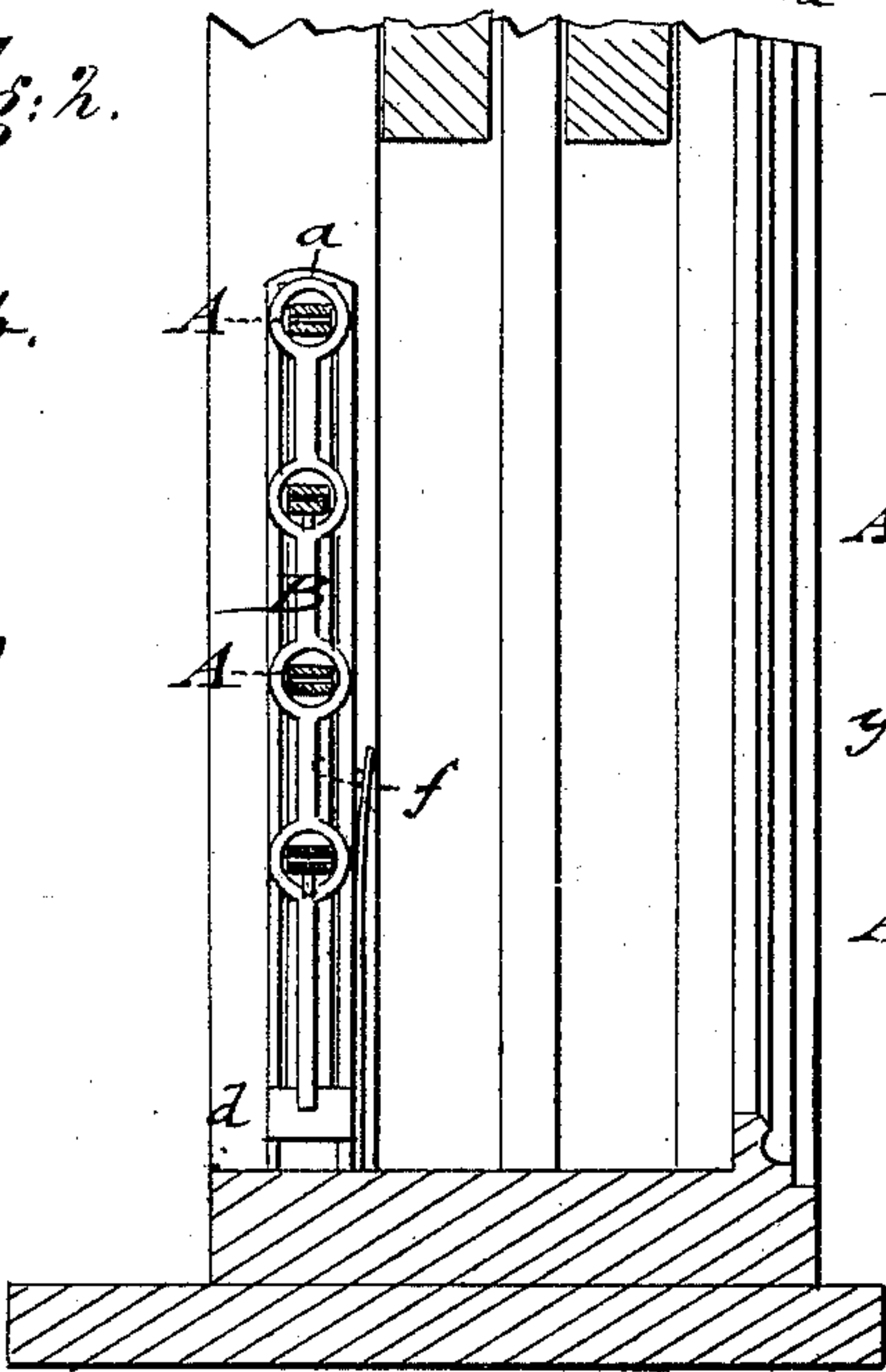
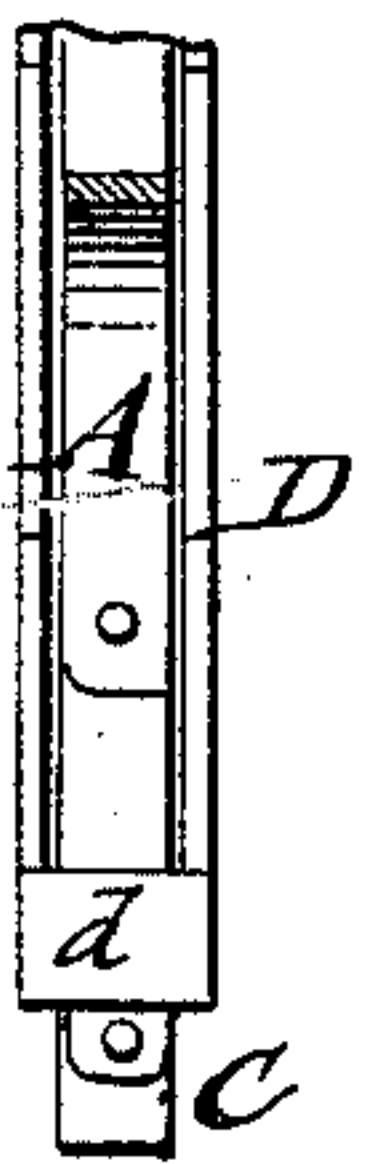


Fig: 2.

Fig: 3.

Fig: 4.



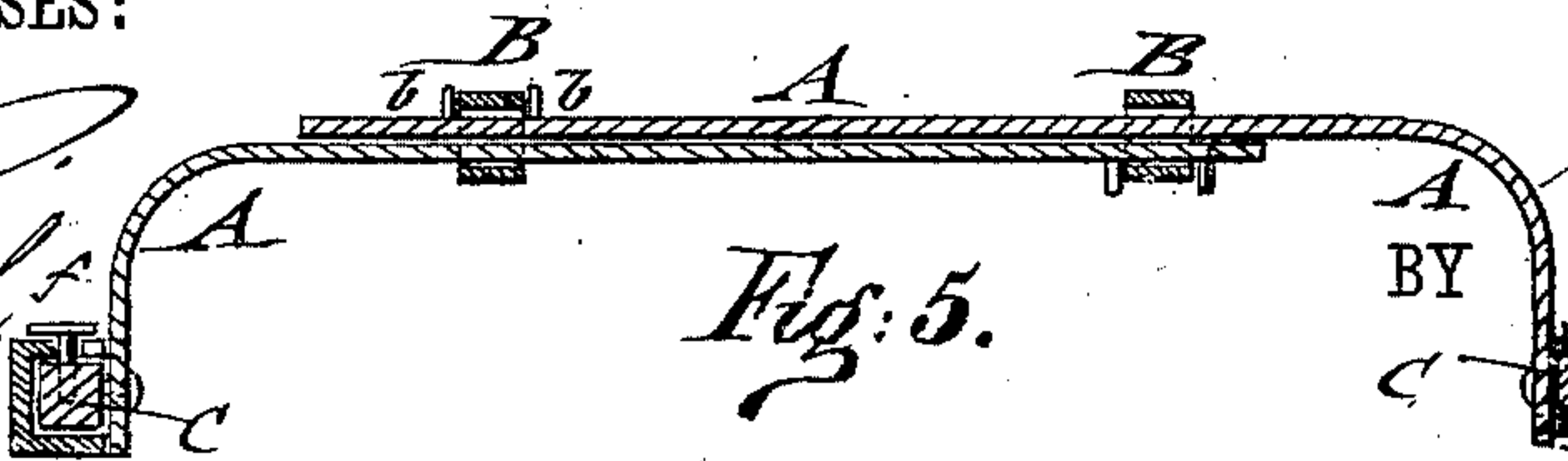
WITNESSES:

INVENTOR:

Carl Karp.
Otto Bischoff

Anton Bischoff
by Paul Goepfer.
ATTORNEY

Fig: 5.



UNITED STATES PATENT OFFICE.

ANTON BISCHOFF, OF NEW YORK, N. Y.

IMPROVEMENT IN GUARD-RAILINGS FOR WINDOWS.

Specification forming part of Letters Patent No. **223,105**, dated December 30, 1879; application filed September 10, 1879.

To all whom it may concern:

Be it known that I, ANTON BISCHOFF, of the city, county, and State of New York, have invented certain new and useful Improvements in Guard-Railings for Windows, of which the following is a specification.

In the accompanying drawings, Figure 1 represents a front elevation, partly in section, of my improved guard-railing for windows. Figs. 2 and 3 are vertical transverse sections of the railing on line *x x*, Fig. 1, showing it, respectively, in raised and in lowered position. Fig. 4 is a detail side view of part of the supporting side box and pivoted railing; and Fig. 5 is a horizontal section on line *y y*, Fig. 3.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish a strong and reliable guard-railing for windows which may be conveniently adjusted for any size of window, readily applied to or removed from the window-casing, and capable of being swung to the outside of the casing for use as a support for cleaning the window, or to the inside thereof, to be out of the way of the shutters.

The invention consists of fixed side boxes attached to the jambs of the window-casing, said side boxes having step-shaped shoulders and transverse top and bottom guide-straps. Slide-pieces with corresponding steps are guided in the side boxes, and retained securely by the straps. To the slide-pieces are pivoted the rails forming the railing, each rail being made of two sections, which are guided in circular sleeves of vertical stays, so as to be readily adjustable to any size of windows. The vertical stays are alternately connected to one of the rail-sections, so as to be set simultaneously with the same. The slide-pieces are secured to the side boxes by suitable locking devices, which, when released, admit the raising or lowering of the slide-pieces and the swinging of the pivoted rails into vertical or horizontal position by the steps of the side boxes as well as by the stays and locking devices.

Referring to the drawings, A A are the rails of my improved guard-railing for windows. Each rail is formed of two sections, which are

connected by vertical stays B, having guide-sleeves *a*, of circular shape. The rail-sections slide in the sleeves of the stays, one alongside of the other, so as to be drawn out or pushed in, that they may be exactly adjusted to the size of the windows. One rail-section of each rail is provided with short pins or studs *b*, which are arranged at the ends of the rail-sections, the pins of one rail engaging one stay while the pins of the next rail engage the other stay, and so on alternately, so as to cause the simultaneous movement of the stays and the symmetrical position of the same on the rails, to whatever length the same are adjusted. The sleeves are large enough to admit the passage of the studs *b* for inserting the rail-sections, and also for turning the sections in the same.

Each rail-section A is bent at an angle of ninety degrees at the end, the ends being pivoted to slide-pieces C, which are guided in side boxes, D, that are attached in reliable manner to the jambs of the window-casing. The slide-pieces C are made step-shaped, to admit the pivot-connection of the rail-sections and their swinging in upright or horizontal position without interfering with each other. The rail-sections differ consequently in length, the lower sections being the shortest and the remaining sections two thicknesses of the rail longer than the rail next below, so that the front ends of all the rail-sections are vertically in line with each other and equidistant from the stays, by which a regular and neat appearance is imparted to the railing.

The slide-pieces C are guided in the side boxes, D, by transverse straps *d* at the upper and lower ends of the boxes, the slide-pieces being of greatest thickness at the lower or heel portion and thinnest at the upper or tongue-shaped end. The heel and tongue ends *d'* are retained by the straps *d*, so that the slide-pieces cannot become detached from the boxes. The side boxes, D, have also step-shaped shoulders *e*, which correspond to those of the slide-pieces, to admit the free swinging of the rail-sections vertically and horizontally. For this purpose the slide-pieces have to be lifted clear of the shoulders of the boxes, so as not to be obstructed thereby. The rail-sections

are then turned down or up into horizontal or vertical position. In the horizontal position of the railing the rail-sections rest on the shoulders of the boxes, as shown in Fig. 3. In this position the railing is outside of the window-casing, and leaves space for flowers, while it may also be conveniently used as a support in cleaning the outside of the windows. The lower ends of the stays rest then on the window-sill, as shown in Fig. 3, which forms an additional support for the railing.

The slide-pieces C are locked to the side boxes by means of a spring-catch, pin, or other device, *f*, so as to be firmly retained thereto. These locking devices are withdrawn when the railing is to be swung up into horizontal or vertical position, the same entering, in the latter case, holes *f'* of the slide-pieces C.

When the railing is in vertical position it is in the same plane with boxes and slide-pieces, and entirely out of the way of the shutters, so as not to interfere with the same. When there are no outside shutters the railing may remain in its horizontal position without being changed.

As the guard-railing may be fitted to any window, it can be removed and taken away when the owners are moving, it forming a durable, convenient, and reliable safety device for houses of all kinds, by which accidents to children or to persons cleaning the windows may be entirely avoided.

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

1. The combination of fixed supporting side boxes of the window-casing, and of step-shaped slide-pieces guided therein, with rails the bent ends of which are pivoted to the steps, to admit the simultaneous swinging of the rails without one obstructing the other, substantially as set forth.

2. The combination of the transversely-adjustable and pivoted rail-sections, connected by vertical stays, with vertically-guided slide-pieces and fixed side boxes of the window-casing, substantially as described.

3. The combination of fixed supporting side boxes, D, having step-shaped shoulders *e* and cross-straps *d d'*, and of step-shaped slide-pieces C, having heel and tongue ends *d' d'*, with pivoted rails A and with locking devices *f*, substantially as and for the purpose specified.

4. The combination of the fixed side boxes, D, having step-shaped shoulders *e*, cross-straps *d*, and locking devices *f*, and of the step-shaped slide-pieces C, having heel and tongue ends *d' d'*, with the pivoted adjustable rails A, having studs *b b*, and with vertical stays B, having guide-sleeves *a*, essentially as specified.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 2d day of September, 1879.

ANTON BISCHOFF.

Witnesses:

PAUL GOEPEL,
CARL KARP.