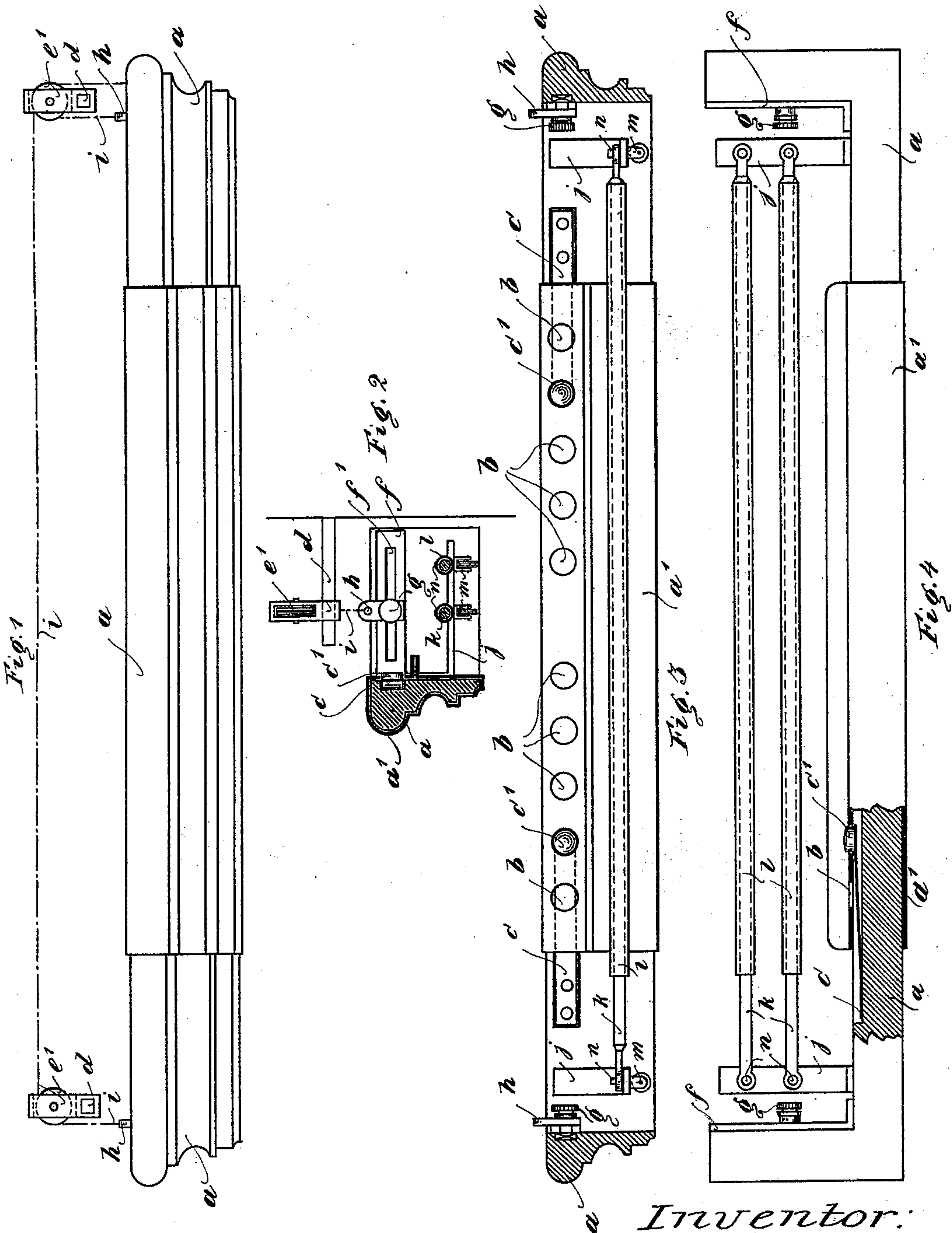


(No Model.)

E. HORN.  
WINDOW SHADE.

No. 518,246.

Patented Apr. 17, 1894.



Witnesses:

E. B. Bolton

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Inventor:  
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By *Richard & Co.*  
his Attorneys.

# UNITED STATES PATENT OFFICE.

EDUARD HORN, OF MUNICH, GERMANY.

## WINDOW-SHADE.

**SPECIFICATION** forming part of Letters Patent No. 518,246, dated April 17, 1894.

Application filed June 28, 1893. Serial No. 479,065. (No model.)

*To all whom it may concern:*

Be it known that I, EDUARD HORN, a subject of the King of Bavaria, residing in Munich, Bavaria, Germany, have invented certain new and useful Improvements in Window-Shades, of which the following is a specification.

My invention relates to a support for shades adjustable in width to fit different sizes of windows and adjustable vertically, so as to gain access to the shades to change them when soiled.

In the drawings:—Figure 1—is a front elevation of the shade holder or support. Fig. 2—is a section through the same. Fig. 3—is a rear elevation, and Fig. 4—is a plan view partly in section.

In the figures the main support of the shades is in two parts *a* which are connected by and adjustable within a metallic casing *a'*, which incloses the ends of the sections *a* as shown in Fig. 2—and these sections are adjusted longitudinally of said casing to make the support wider or narrower according to the width of the window.

In order to lock the parts in any position to which they are adjusted, each section *a*, is provided with a spring catch *c* having knob *c'* adapted to enter openings *b* in the metal casing *a'* on its rear side. Before adjusting the sections in or out, these spring catches must be operated.

The frame is supported in position by cords *i* which pass over pulleys *e'* supported at each end of the window frame upon rods *d* so as to be adjustable thereon, these rods being square to prevent turning of the pulley blocks. The cords may be brought within convenient reach

and thus the frame may be readily lowered for any purpose. The ends of the cords are secured to the frame *a* through eyes *h* which are held by screws *g* within elongated slots *f'* (Fig. 2) of angle plates *f*, and thus these eyes may be adjusted laterally to maintain the equilibrium of the shades. Angle plates or brackets *j*, secured to the frame *a* serve to support the ends of the rods *k* which hold the shades, these shade rods being composed of a rod and tube *l* so that as the sections *a* are adjusted, the rods slide within the tubes and are thus correspondingly shortened or lengthened. These shade supports are secured to the brackets *j* by pins *n* passing through eyes and on the under side of the brackets are secured pulleys *m* through which cords may be passed to manipulate the shades.

Having thus described my invention, what I claim is—

A frame or support for shades consisting of two sections *a* held together adjustably by an inclosing casing *a'* and spring catches having knobs *c'* engaging openings in the casing, brackets *j* carried by said sections, telescopic rods supported by said brackets and adjustable supporting means for said sections consisting of the slotted plates *f*, *f'*, and the eyes *h*, *h* adjustably secured therein and supporting means connecting with said eyes, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

EDUARD HORN.

Witnesses:

ADOLF HENLEIN,  
OSCAR BOCK.