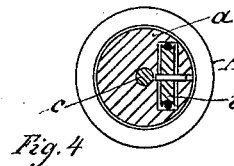
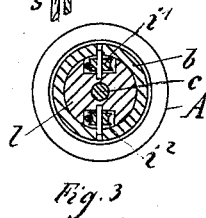
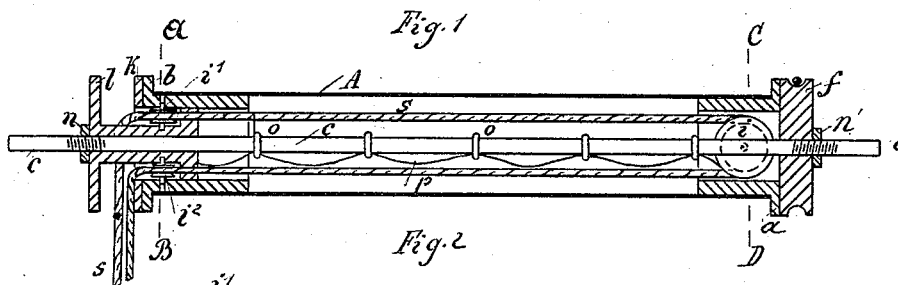
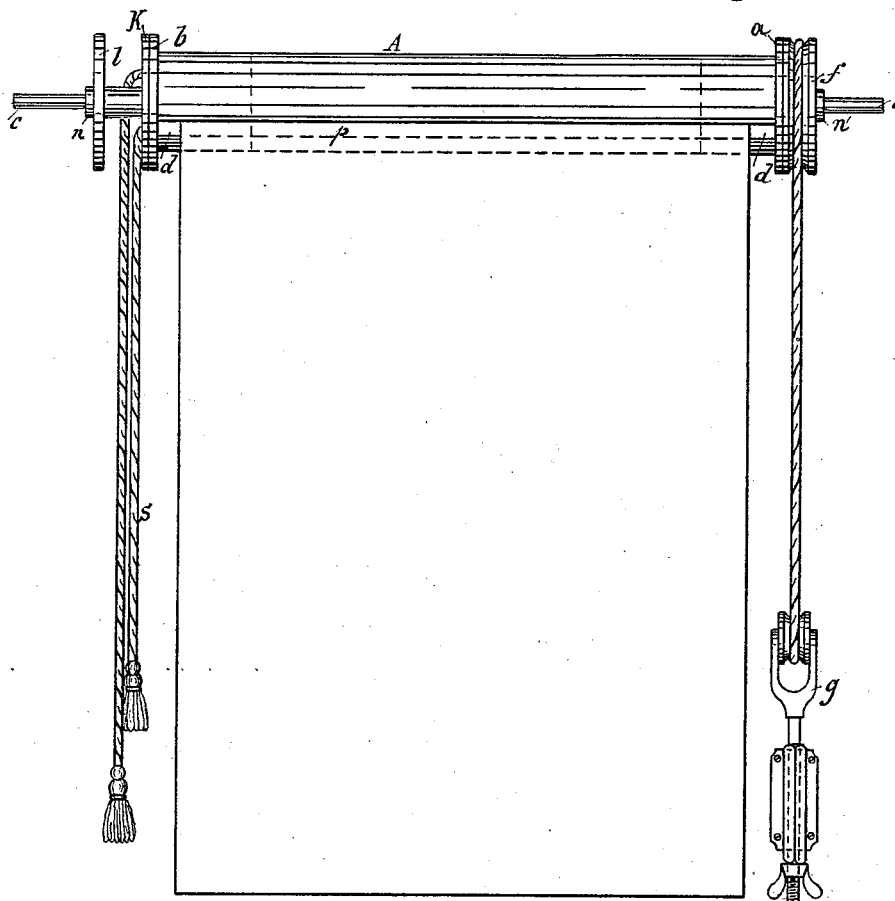


(No Model.)

O. KLUGE.  
ROLLING CURTAIN.

No. 346,999.

Patented Aug. 10, 1886.



Witnesses:  
Eugene H. Hartman  
Theodore Bauer

Inventor:  
Oscar Kluge.  
per Simon Capitaine  
Attorney.

# UNITED STATES PATENT OFFICE.

OSKAR KLUGE, OF BERLIN, GERMANY.

## ROLLING CURTAIN.

SPECIFICATION forming part of Letters Patent No. 346,999, dated August 10, 1886.

Application filed June 19, 1885. Serial No. 169,245. (No model.) Patented in Germany January 27, 1885, No. 31,999, and in Austria March 14, 1885, No. 1,447.

*To all whom it may concern:*

Be it known that I, OSKAR KLUGE, a subject of the King of Prussia, German Empire, residing at the city of Berlin, in the German Empire, have invented certain new and useful Improvements in Rolling Curtains, (for which I obtained a patent in German Empire bearing date January 27, A. D. 1885, No. 31,999, and in Austria under date March 14, 1885, No. 1,447,) of which the following is a specification.

This invention relates to a device by means of which blinds or curtains may be drawn sideways to the right and left, as well as up and down. Hitherto it has been customary to use blinds or curtains which roll up, and also such as are drawn sideways when it is desired to alter their position. By means of the roller of this invention both of these movements may be effected, and thus the sun's rays may be shut out at every point.

The invention consists in a form of construction of apparatus such as will allow of a blind or curtain being moved at will both up and down and sideways to the right and left. This construction is shown in the accompanying drawings, in all the figures of which similar letters of reference indicate like parts, and in which—

Figure 1 is a front elevation; Fig. 2, a longitudinal section; and Figs. 3 and 4, cross-sections, the former taken through the line A B and the latter through the line C D of Figs. 1 and 2.

The roller which serves for the winding up and down of the blind or curtain, and which may also be moved sideways, consists of a metallic casing, A, through the center of which passes a rod, c. At each end of the metallic casing A is fixed a sleeve or socket, constructed as indicated at a and b. The metallic casing A and the two sleeves or sockets a and b have formed in them a longitudinal slot, d.

To the sleeve or socket a is fixed a cord-pulley, f, which is also carried on the rod c. The pulley f, adjusting-bracket g, and a connecting-cord form an ordinary raising and lowering mechanism. Within a slot or opening formed in the sleeve or socket a is mounted a pulley, i, and similarly in the other sleeve or socket, b, are mounted two small pulleys, i' i'', opposite two corresponding slots or openings in the end cap.

To the socket or sleeve b is attached a disk, k, to which is soldered or otherwise fastened a socket or sleeve, l, which is also carried on the rod c. The whole is tightened up by small screw-nuts n n'.

On the rod c, within the casing A, are provided a number of rings, o, to which a band, p, is attached by sewing. This band p is of a length to extend from the disk c to the disk k. It passes through the longitudinal slot d and serves for attaching the fabric of which the curtain or blind is composed.

A band, s, is carried into the casing A over the pulley i' to i, and back again on the other side to i'' in such manner that the two ends of the same respectively pass out through the two slots or openings in the disk k and hang downward, each of the ends being provided with a handle. The band s is attached to the first of the rings o from the right hand, so that the latter must follow the movement of the band.

When one of the two ends of the band s is pulled down, the whole of the rings o slide together along the rod c, and thus the blind or curtain is drawn to one side. It may now also be drawn either up or down, when the ends of the band s wind up on the socket or sleeve l and the blind or curtain on the casing A, and may stand at any desired part of the height.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a curtain-fixture, the combination of a slotted hollow roller pivoted in suitable brackets and having the usual pulley and cord for operating the same, a rod running longitudinally through the roller, a series of rings traveling on said rod, a single pulley attached to one end of the roller inside the same, a double pulley at the opposite end of the roller, and cord passing over said pulleys and attached to one of the rings, so that the curtain may be drawn aside or rolled upon the roller, substantially as set forth.

In testimony whereof I signed this specification in the presence of two subscribing witnesses.

OSKAR KLUGE.

Witnesses:

R. NEUMANN,  
B. ROl.