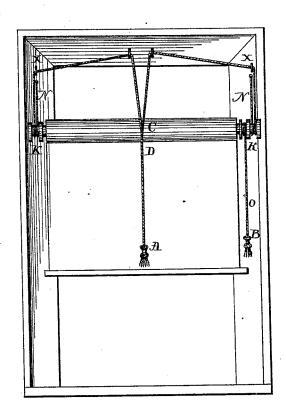
J. COLLINS & J. D. SALTSGAVER.

CURTAIN FIXTURES.

No. 186,198.

Patented Jan. 16, 1877.



Witnesses:

A.S. Asherton.

Inventor: Janus Cllins, John D. Sattgaver.

UNITED STATES PATENT OFFICE.

JAIRUS COLLINS AND JOHN D. SALTSGAVER, OF FAIRVIEW, OHIO.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. 186,198, dated January 16, 1877; application filed September 29, 1876.

To all whom it may concern:

Be it known that we, JAIRUS COLLINS and JOHN D. SALTSGAVER, of Fairview, in the county of Guernsey and State of Ohio, have invented a new and useful Improvement in Window-Curtain Adjustment, which improve ment is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of our invention is to adjust a window-curtain to any position desired by rolling it down from the top, or taking it up from the bottom of the window by the use of one roller, C, to take the curtain up or let it out,

when desired.

The accompanying drawing is a perspective view of a window-frame and our improved curtain adjustment, representing a curtain adjusted so as to admit light from top and bottom of the window at the same time. In this position the curtain is partially wound around the roller C, and the cords N N, which are fastened at the top of the window-casing, extend down to the roller C, and are wrapped once around the grooved pulleys K K on the end of the roller, and passed back through the screw eyes X X at the top of the window, and unite in one cord at D, to the end of which is suspended the weight A, for the purpose of balancing the roller C. By arranging the screw-eyes at the top of the window the cord D may hang on either side or in the center of the window. The roller is furnished with a groove at one end, which may be made in the roller or otherwise, for the purpose of containing the wrap of the cord O, which is fastened in the groove and wrapped in the opposite direction from the curtain. The grooved pulleys |

KK are fastened on the end of the roller by means of a screw, which acts as a journal for

the pulleys to revolve on.

To illustrate the action of our improvement we will suppose it is desired to close the top of the window; it is evident from the arrangement of the cords N N that by pulling on the cord D the roller will ascend and unwind the curtain. The cords N N will wind on and off of the grooved pulleys K K till they come in contact with the screw-eyes X X at the top of the window. To close the curtain at the bottom of the window, it is only necessary to pull the bottom of the curtain down, which causes the roller to revolve, which unwinds the curtain and winds up the cord O, and by pulling on the cord O the roller will turn in the opposite direction, which takes up the curtain and unwinds the cord O.

The difference between this device and patent to J. Collins, No. 178,512, which was assigned to himself and John D. Saltsgaver, consists in the arrangement of the grooved

pulleys K K and cords N N.

The pulleys or end pieces K K in said patent have two circumferential grooves-one to receive the wrap of the cords N N, and the other to receive the wrap of the cords M M.

We claim as our improvement-

The single-grooved pulleys K K and the cords N N, substantially as described, when operated in combination with the grooved curtain-roller.

JAIRUS COLLINS. JOHN D. SALTSGAVER.

Witnesses:

A. H. ATHERTON, M. A. ATHERTON.