

(No Model.)

2 Sheets—Sheet 1.

W. R. KINNEAR.
ROLLING BLIND.

No. 575,607.

Patented Jan. 19, 1897.

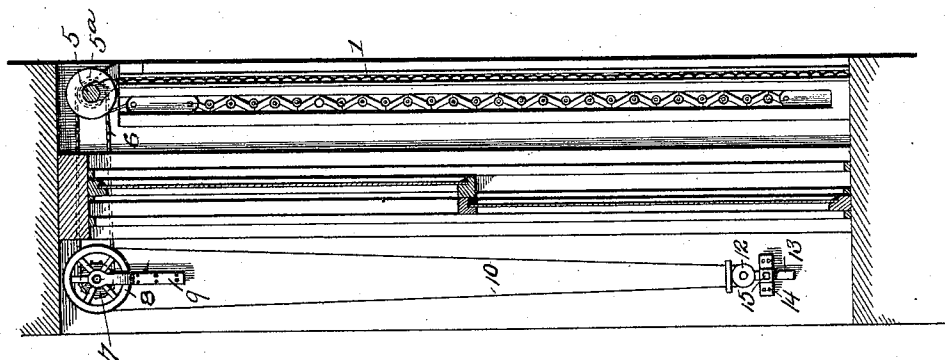


Fig. 2.

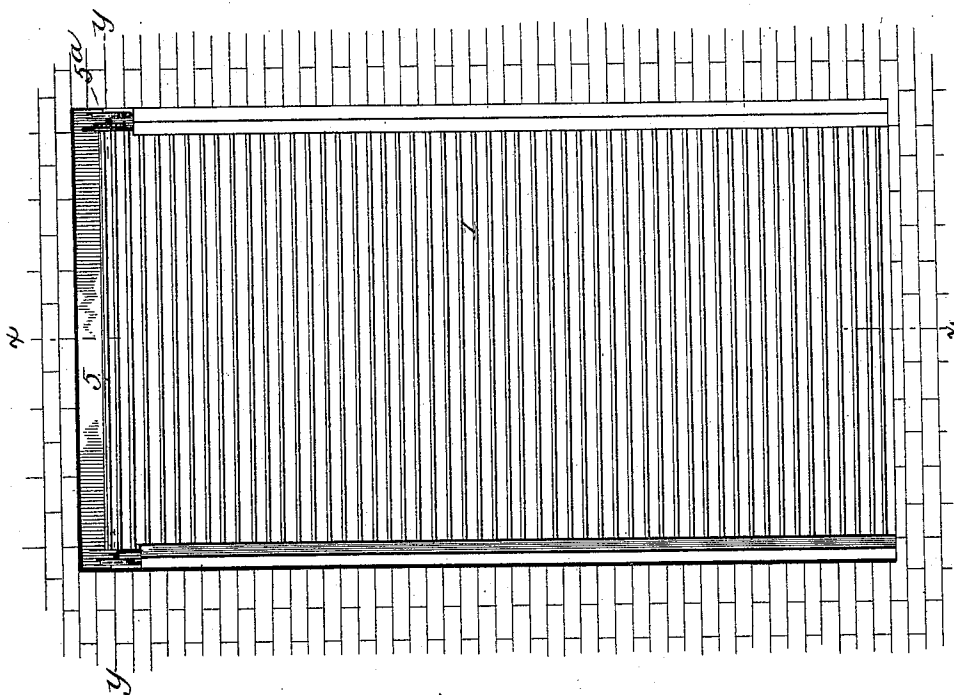


Fig. 1.

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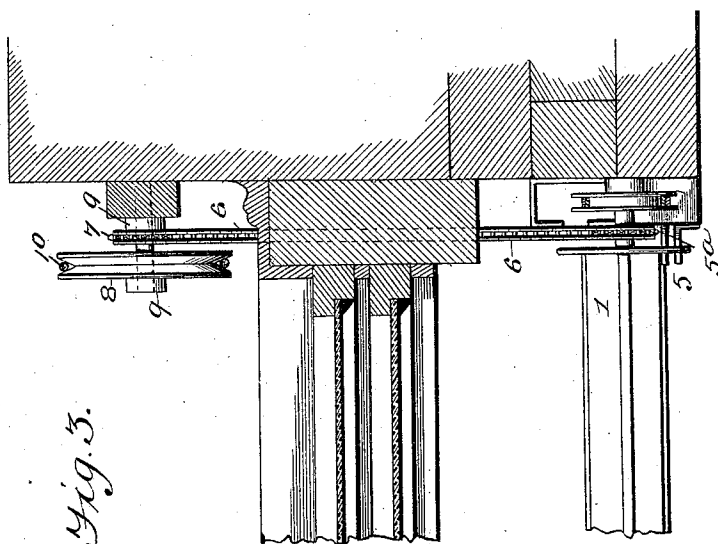
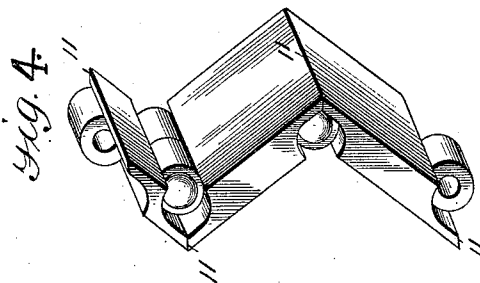
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2 Sheets—Sheet 2.

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UNITED STATES PATENT OFFICE.

WILLIAM R. KINNEAR, OF COLUMBUS, OHIO.

ROLLING BLIND.

SPECIFICATION forming part of Letters Patent No. 575,607, dated January 19, 1897.

Application filed April 6, 1895. Serial No. 544,711. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. KINNEAR, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Rolling Blinds; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to metal fireproof curtains that roll up on a roller.

The particular object of my invention is to provide an improved counterbalancing-weight for the same.

In the accompanying drawings, Figure 1 represents a front elevation of a window provided with a rolling fire curtain or blind. Fig. 2 is a vertical sectional view on the line *xx* of Fig. 1. Fig. 3 is an enlarged horizontal sectional view on the line *yy* of Fig. 1. Fig. 4 is a detail perspective view showing the construction of the links composing the chain for counterbalancing the curtain when lowered.

In the several views corresponding parts are designated by like characters of reference.

1 designates the slats composing the curtain or blind, and the curtain may be rolled up on a suitable roller 5, journaled in the upper part of the window. When the slats are joined, any suitable device or method may be employed to prevent their longitudinal movement on each other, and the edges of the curtain will project into and slide in suitable grooves in the sides of the window. At one end of the roller is a sprocket-wheel 5, over which passes a sprocket-chain 6, passing inward through holes in the window-frame and over another sprocket-wheel 7, made fast on the shaft of a drum-wheel 8, that is supported on a bracket 9, secured to the side of the window-frame. The drum is turned in either direction by means of a rope 10, passing around or attached thereto, and also passing around a small pulley 12 on the end of a slide 13, adjustably secured on a bracket 14, attached to the window-frame. A set-screw 15 holds the slide in place. The curtain is raised or lowered by pulling on one part or the other of

the rope, so imparting rotary motion through the sprocket-chain 6 to the curtain-roller.

My improved counterbalancing-weight consists of a chain made up of links constructed substantially as shown in Fig. 4, so that the chain may be made as heavy and to occupy the least room possible and thereby reduce the size of the pocket to contain the same and at the same time enable the chain to readily fold together when lowered. The links, as will be understood from an inspection of this figure, are of block form, with a perforated eye on each end and at opposite sides of the block, the length of the two eyes being less than the width of the block, and they are hinged together by means of a bolt passed through the adjoined eyes and secured by a nut. The ends of the block have flanges which are preferably beveled, as shown at 11, and form shoulders which abut against each other, and when lifted the chain assumes a zigzag form, which insures the folding of the links into a pile when the curtain is raised and the chain lowered in its pocket, and the flanges also increase the weight of the chain. The uppermost link of the chain will preferably be made of about half the length of the others, so that the draft of the lifting sash-cord will be substantially in a line centrally through the chain. As the curtain is lowered at one side of the roller the weight-cord is wound up and the chain lifted on a drum at the opposite side thereof. A weight heavier than the links may be attached to the lower end of the chain.

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

A variable counterbalancing-chain for rolling blinds constructed of metallic blocks of parallelepiped form having the beveled abutting shoulders extending entirely across their ends, and eyes and pintles for connecting the blocks located centrally on the adjoined ends of the blocks as and for the purpose explained.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM R. KINNEAR.

Witnesses:

GEORGE W. FINCHER,
ADONIRAM J. SMART.