(No Model.) 2 Sheets—Sheet 1.

J. R. HARTFORD.

PAPER HANGING MACHINE.

No. 398,154. Patented Feb. 19, 1889.

Fig. 1.

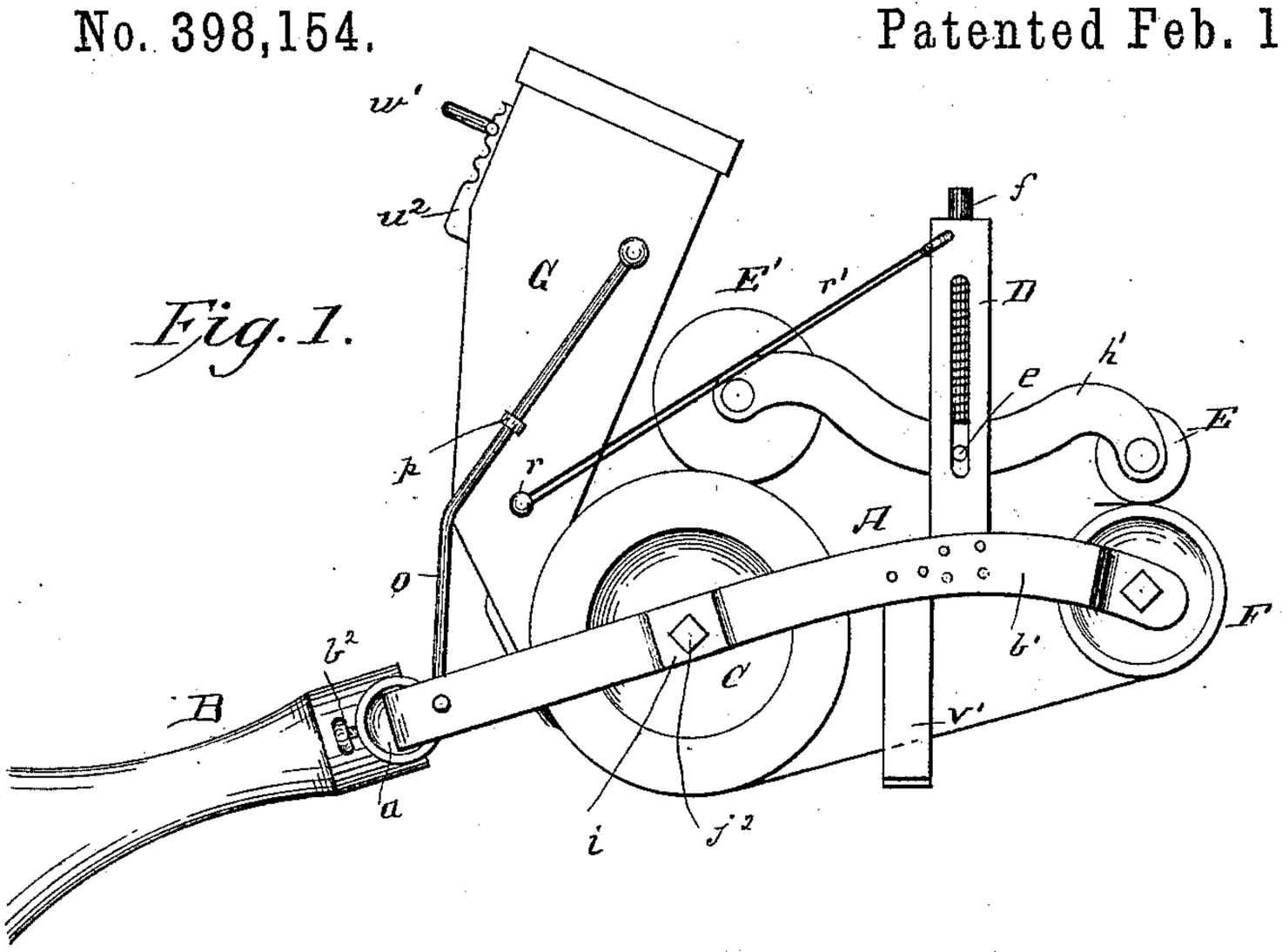
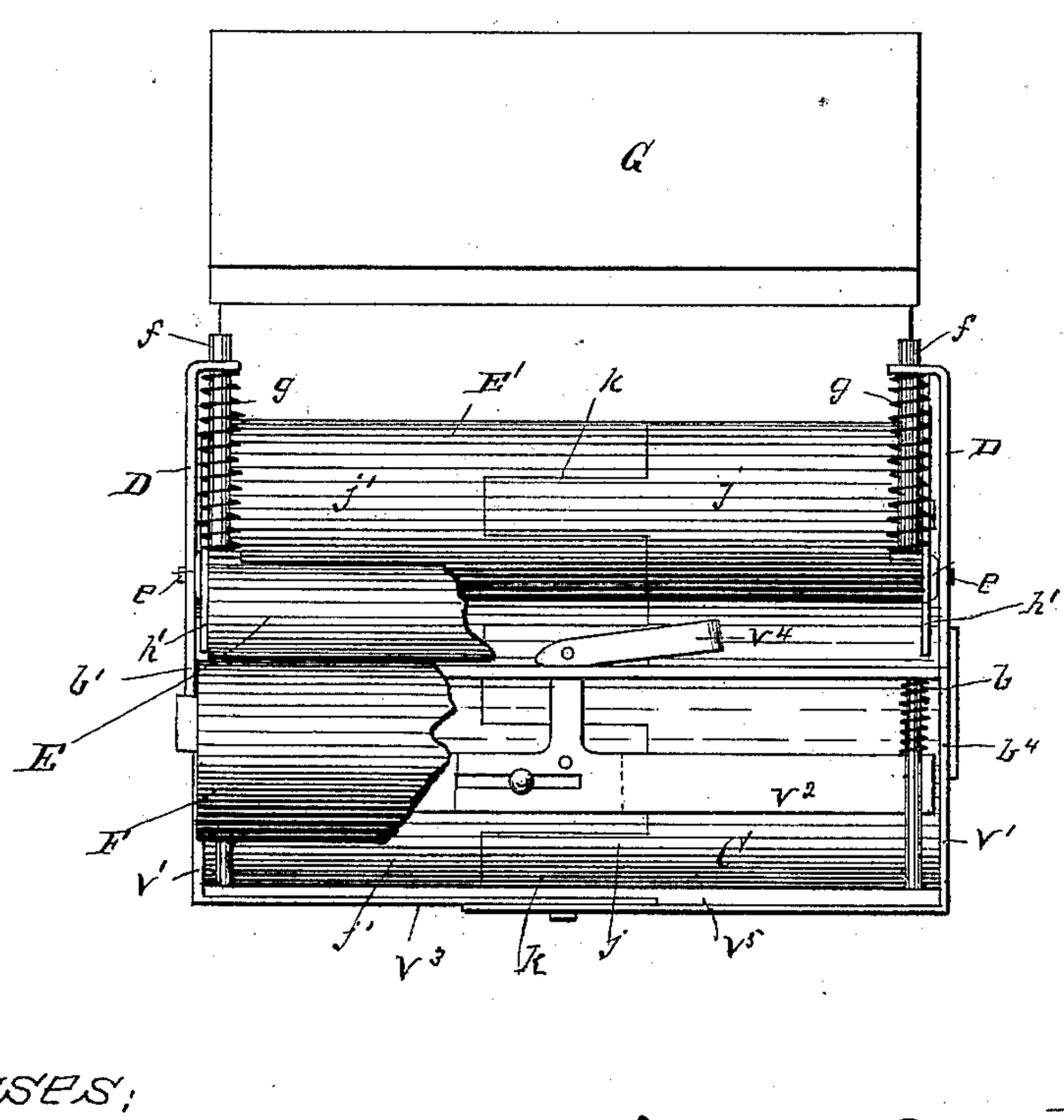


Fig. 2.



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(No Model.) 2 Sheets—Sheet 2.

J. R. HARTFORD.

PAPER HANGING MACHINE.

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Fig. 3

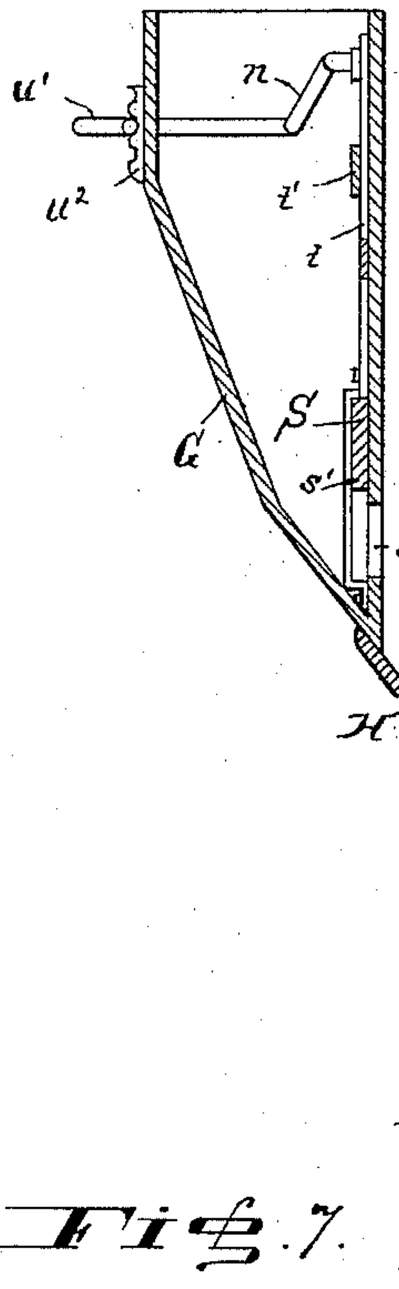


Fig. 4.

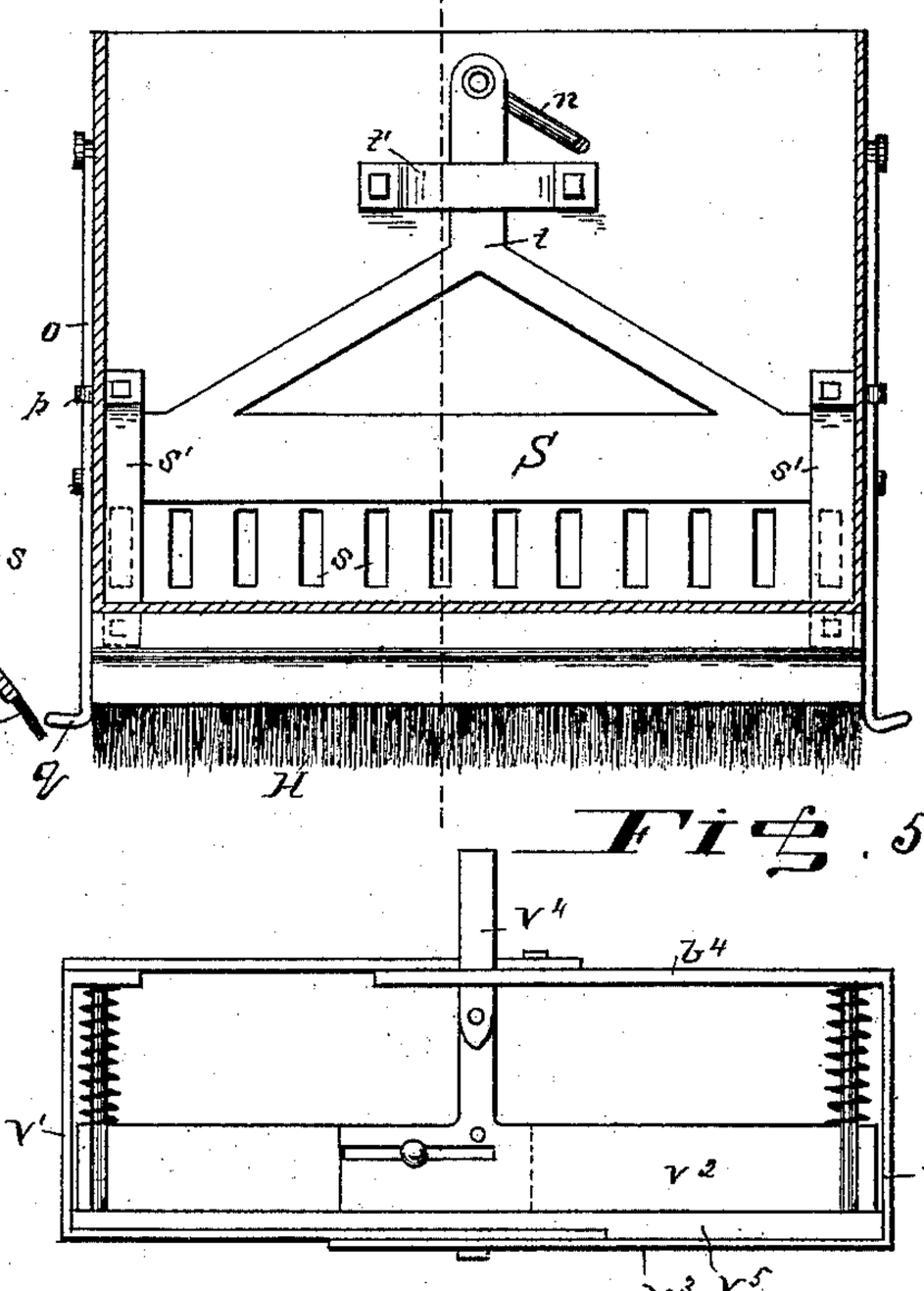


Fig. 5.

Fig. 7.

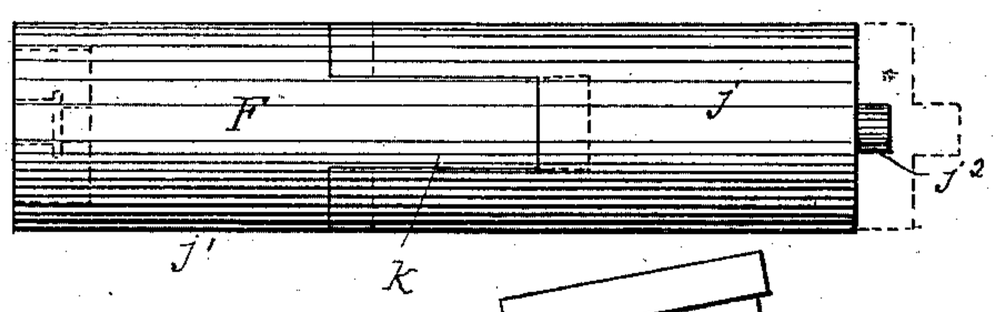
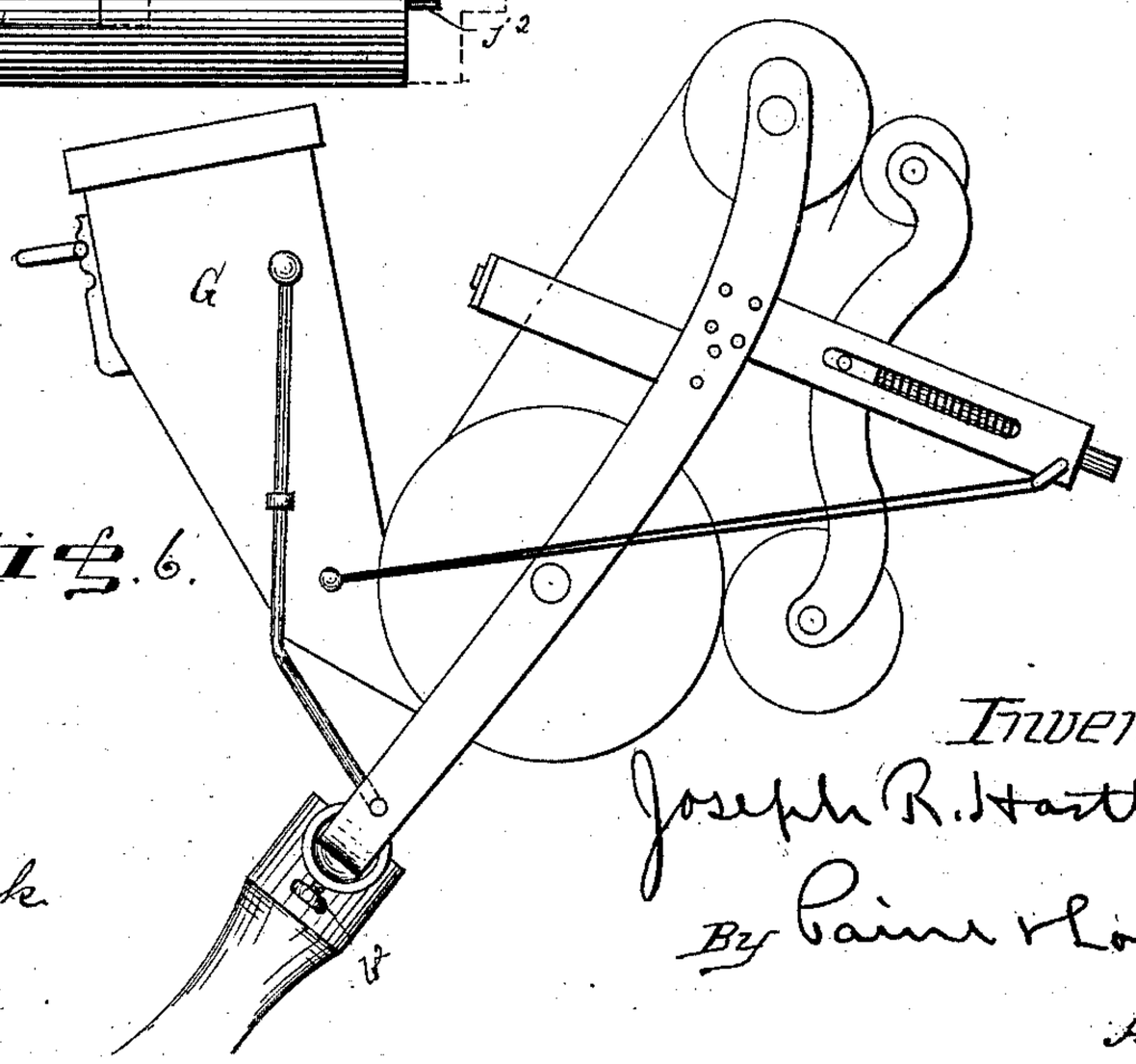


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOSEPH R. HARTFORD, OF CARTHAGE, ILLINOIS.

PAPER-HANGING MACHINE.

SPECIFICATION forming part of Letters Patent No. 398,154, dated February 19, 1889.

Application filed September 2, 1887. Serial No. 248,635. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH R. HARTFORD, a citizen of the United States, residing at Carthage, in the county of Hancock and State of Illinois, have invented certain new and useful Improvements in Paper-Hanging Machines; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to machines for hanging wall-paper; and it consists in the novel construction and combinations of the parts, hereinafter fully described and claimed.

In the drawings, Figure 1 is a side view of the machine. Fig. 2 is a front end view of the same, portions of the two upper rollers being shown broken away to exhibit the paper-cutting-off device. Fig. 3 is a cross-section through the paste-box. Fig. 4 is an internal view of the paste-box from the rear, with the back removed to show the device for controlling the feed of paste. Fig. 5 is a detail front view of the paper-cutting-off device. Fig. 6 is a side view showing a modification in the arrangement of the parts of the machine, whereby it is adapted for ceiling work. Fig. 7 is a detail view of one of the rollers.

A is a frame provided with a handle, B, and D are slotted arms secured to the sides *b b'* of said frame.

C is the roller upon which the paper is wound, and F is the distributing-roller for pressing the pasted paper against the wall. Both rollers C and F are journaled in the sides *b b'* of frame A.

G is the paste-box, provided with holes *s* at its lower end, through which the paste may flow onto the brush H.

S is a slide for covering the holes *s* and regulating the supply of paste. This slide is guided by the strips *s'* inside the box, and is provided with the extension *t*, which is guided by the bracket *t'*. A crank, *n*, is pivoted to the end of the extension *t*, and is provided with a spindle, *u'*, journaled in the back of the box, and having a projection for engaging with the catches u^2, so that the slide may be held in various positions by turning the spindle and placing the projection in different catches.

Rods *o* are secured to the paste-box, and are provided with hooks *q* at their ends, which engage pivotally with holes in the frame A, and *r'* are rubber cords or springs, which connect the lower end of the paste-box with the upper ends of the arms D and press the brush and paste openings upon the paper as it is unwound off the roll C.

The cutting-off device is supported in the frame V', which is secured to the frame A between the rollers C and F. It consists of a spring-pressed knife-blade, V^2, which comes down upon the paper and cuts it off against the wooden block V^5, secured upon the lower member, V^3, of the frame V'.

An arm, V^4, is pivoted to an extension on the upper part of the blade. This arm passes through a hole in the upper member, b^4, of the frame V', and when turned sidewise, as shown in Fig. 2, it holds the blade raised up against the pressure of the springs. When the arm V^4 is turned at right angles to the blade, the springs force the said blade down and cut off the paper against the block.

Two bars, *h'*, are provided, and in them are journaled the rollers E and E'. The roller E bears against the roller F and clamps the end of the paper, as shown in Figs. 1 and 6, and the roller E' bears against the paper on the roller C and prevents it from unwinding too fast. The bars *h* are provided with guide-pins *e*, which engage with the slots in arms D, and *f* are spindles, also secured to bars *h'* and passing through flanges at the top of arms D. Springs *g* are arranged between the said flanges and the bars for pressing the rollers E and E' against the rollers F and C.

The eyes *p* are secured to the paste-box for the attachment of rods *o*, but may be dispensed with, if desired. The side bars, *b b'*, are secured to the handle B by the horizontal sliding portions *a* and the screws b^2, or by any other convenient form of attachment. The roller F is made in two portions, *j* and *j'*, the latter of which is provided with the central tongue, *k*, so that the roller may be lengthened out, as indicated by the dotted

lines in Fig. 7, to adapt it for wider paper, and all the other rollers may be constructed in a similar manner. A square end, j^2, is formed on the end of the spindle of roller C for the attachment of a winding-key. The paper is first wound upon roller C by hand and the paste-brush is pressed against it. The paper is then unwound a short distance and the extreme end held between rollers E and F. The paper is then applied to the wall by roller F, and a slight upward movement causes the end to be disengaged from between rollers E and F and to adhere to the wall. The paper is then applied by a downstroke of the machine and is cut off at the bottom of the wall.

I do not claim making the frame in parts, so as to be adjustable to different widths of paper, nor making the rollers with tongues, so that they may be lengthened out, nor making the knife-blade for cutting off the paper in two pieces.

What I claim is—

1. In a paper-hanging machine, the combination, with the frame provided with a handle, of the paper and distributing rollers journaled in said frame, and the rollers E and E′, bearing against the aforesaid rollers, substantially as set forth.

2. In a paper-hanging machine, the combination, with the frame provided with a handle, of the paper and distributing rollers journaled in said frame, the frame V′, secured between the said rollers, and the spring-knife blade and cutting-off block supported in said frame V′, substantially as and for the purpose set forth.

3. In a paper-hanging machine, the combination, with the frame A, of the paste-box provided with adjustable outlets and a brush, the rods pivotally securing the paste-box to the frame, the paper-roller journaled in the said frame, and the springs pressing the paste-box and brush against the paper on the roller, substantially as and for the purpose set forth.

4. In a paper-hanging machine, the combination, with the paste-box provided with internal guides s' and t', and apertures for the paste, and the brush at its lower end, of the regulating-slide inside the box, and the cranked rod for adjusting said slide, substantially as and for the purpose set forth.

5. In a paper-hanging machine, the combination, with the frame V′, having upper and lower members, of the block secured to the lower member, the spring-pressed cutting-off blade, and the retaining-arm V, pivoted to an extension on the back of the blade, and passing through a hole in the said upper member, substantially as and for the purpose set forth.

6. In a paper-hanging machine, the combination, with the frame A, of the rollers C and F, journaled in said frame, the slotted arms D, secured to said frame, the bars h', provided with pins sliding in said arms D, the rollers E and E′, journaled in said bars, and the springs pressing the pairs of rollers together, substantially as and for the purposes set forth.

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

JOSEPH R. HARTFORD.

Witnesses:
W. H. GRIFFITH,
R. R. GRIFFITH.