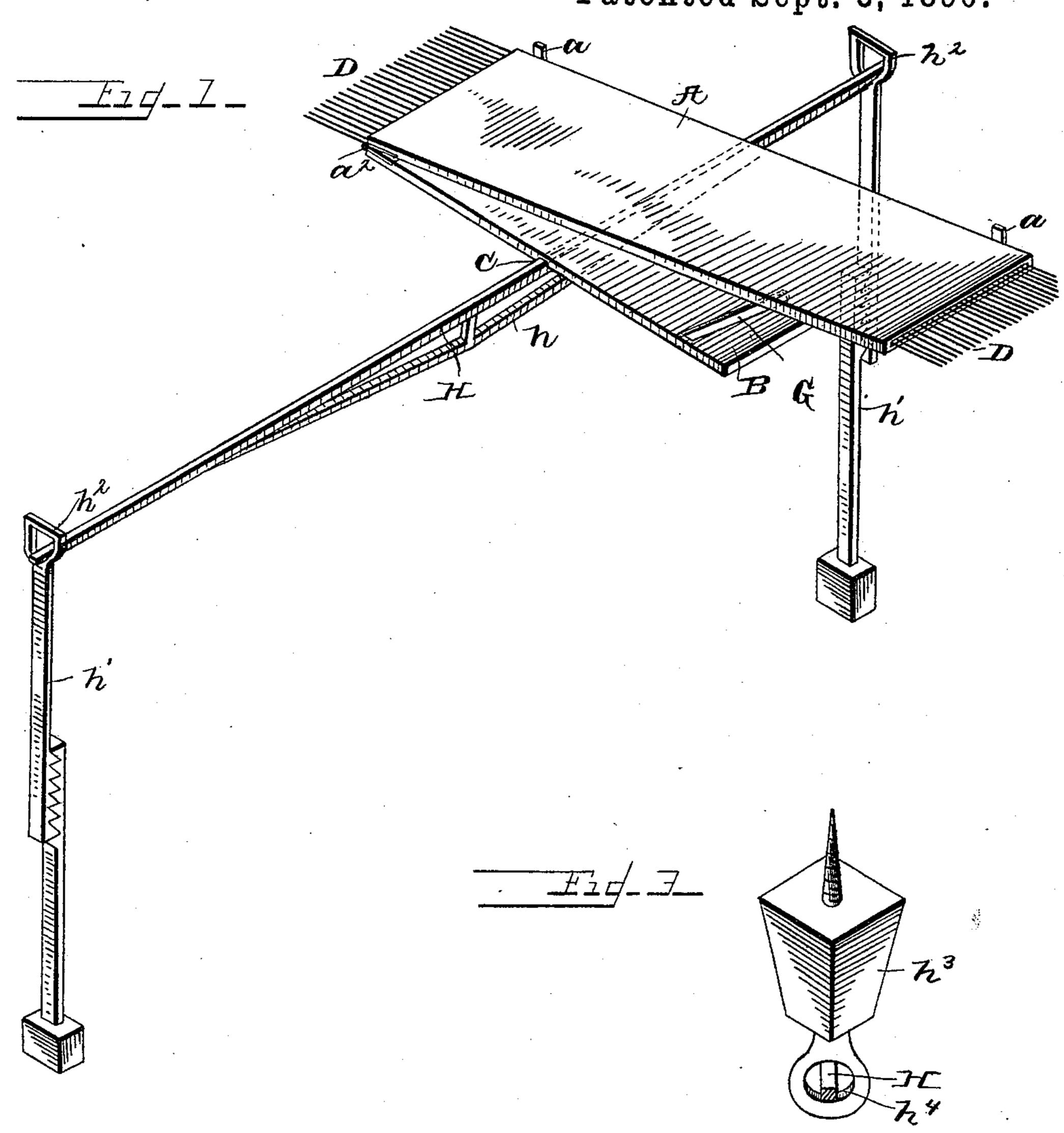
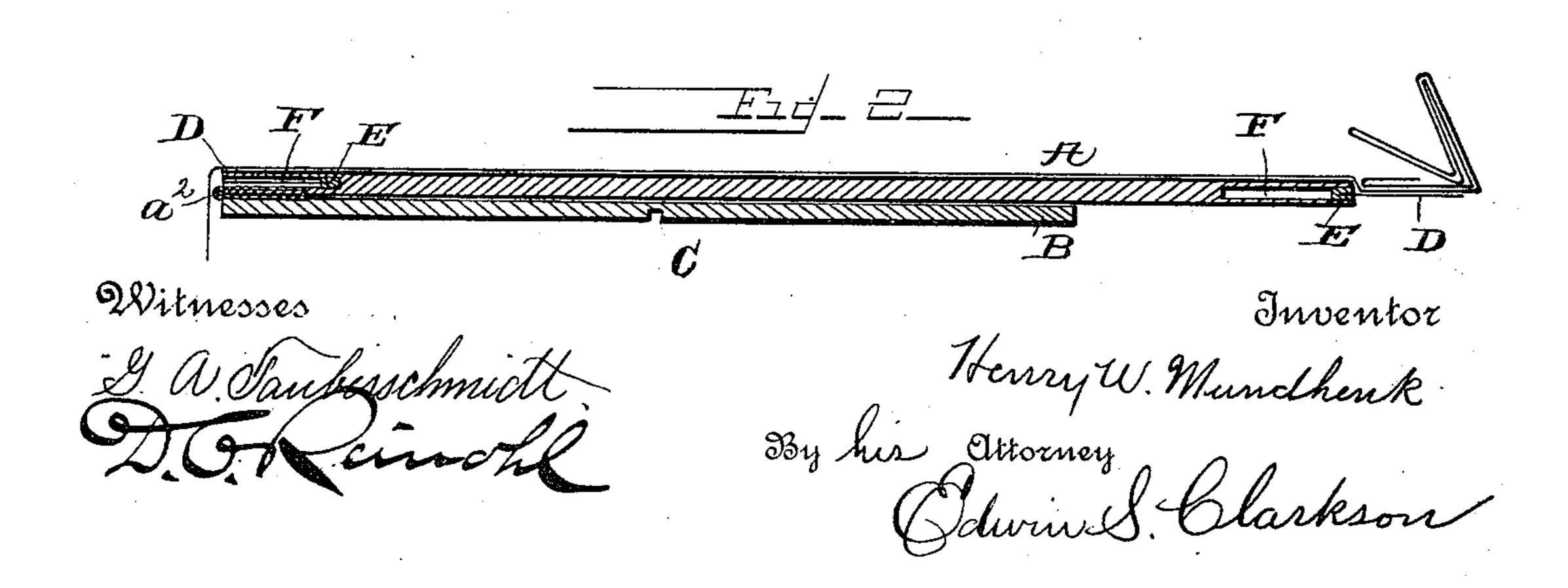
(No Model.)

## H. W. MUNDHENK. PAPER HANGING MACHINE.

No. 436,144.

Patented Sept. 9, 1890.





## United States Patent Office.

HENRY W. MUNDHENK, OF GILMAN, IOWA.

## PAPER-HANGING MACHINE.

SPECIFICATION forming part of Letters Patent No. 436,144, dated September 9, 1890.

Application filed January 28, 1890. Serial No. 338,372. (No model.)

To all whom it may concern:

Be it known that I, HENRY W. MUNDHENK, a citizen of the United States, residing at Gilman, in the county of Marshall and State 5 of Iowa, have invented certain new and useful Improvements in Paper-Hanging Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the to art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to machines for holding up ceiling-paper while hanging the same.

Heretofore great inconvenience and annoyance have been experienced in papering ceilings, more especially in stores, where the 20 counters, show-cases, and shelving are in the way of the workmen and prevent their working very rapidly or thoroughly, thus causing

loss of time, money, &c.

The object of my invention is to overcome 25 these serious objections by papering from the center of the ceiling and providing a machine which requires only two or three feet in the center of the ceiling, said machine consisting of a frame about four feet long by twenty 30 inches wide and three inches deep, made of light wood, provided with two strips running lengthwise of the machine. I then stretch canvas very tight over said frame. A slide made of a series of steel wires about ten 35 inches long and about three inches apart is placed at each end of the frame, said wires being attached to a sliding block which works in a groove inside of said frame, as seen in Figure 2, so that the slides can be worked in 40 or out at the will of the operator. On or near either corner, both front and rear, on one side a tip is secured and extends about one-half inch above the canvas, the tip being so secured that it can be turned up or down 45 at the will of the operator, said tip to be used as a guide for placing the paper on the machine. To this frame is attached a second and somewhat smaller frame of such width and length as to work inside and underneath 50 the top frame, said lower frame being hinged

said top frame and engages with the lower frame and serves to hold the top frame up against the ceiling. A spring or other suitable means may, if desired, be used in place 55 of this lever. The lower frame is provided with a notch or guideway in its under side to engage a suitable track which supports the entire machine, said track being supported by rack or telescoping standards, or by means 60 of a block secured into the ceiling with an eyebolt running through it.

I have illustrated my invention in the accompanying drawings, and it is fully disclosed in the following specification and claims.

In the drawings, Fig. 1 is a perspective view of my machine as it would appear on the track. Fig. 2 is a central section of the same showing the slides, one of said slides being out with the folded end of paper rest- 70 ing thereon, the other slide being in, allowing the folded end to drop. Fig. 3 is a modified form of construction for securing the track to the ceiling.

A represents the main or top frame, which 75 is covered with canvas and provided with suitable means to keep the canvas from sag-

ging.

a a represent the guide-tips, and B the under or bottom frame, which is hinged to said 80 top frame at  $a^2$ , said frame Bhaving a notch or guide C.

The upper or main frame A is provided with a series of wires D, mounted in a block E, said block E adapted to slide in grooves F. 85

(Best seen in Fig. 2.)

This machine is placed and runs on the track H, provided with suitable braces h to keep it in a horizontal plane, the said track H being supported by suitable adjustable 90 standards h'h', said standards being provided with square heads  $h^2$ , which have suitable recesses in the top in order that the track H may be placed in the heads  $h^2$ .

In Fig. 3 I have shown another form of sup- 95 port for the track H, especially adapted for use on high ceilings, which consists of a block  $h^3$  of suitable size, provided with an eyebolt  $h^4$  passing through it. The point of said eyebolt is provided with screw-threads and ex- 100 tends a suitable distance out of the top of to the upper frame. A lever is pivoted to I the block. In use this point is screwed into

the ceiling, and the ends of the track are

placed in the eye of said bolt.

To paper with my machine I proceed as follows: I first draw a suitable guide-line through 5 the center of the ceiling. The poles or standards h' are placed in a proper position and extended the proper height, care being taken to place the recesses in the heads  $h^2$  of standards in line with the guide-line, and then place to the track H in position by inserting the ends in the recesses in head-blocks  $h^2$ . The track is now ready to receive the machine. At this point I cut the paper the desired length. I then take some figure on the paper for a guide 15 and mark the strip of paper on the wrong side. This mark is placed in line with the mark on the canvas, so that when the paper is placed on the ceilingallthe figures correspond. The paper is then pasted and folded from both ends, so as 20 to leave a space in the center about the size or length of the machine. The ends are now refolded in such a manner that they will occupy a space of about ten inches and rest on the wire slides. The paper is now ready to be 25 put on the machine. I first pull out the slides D and raise the tips a  $\alpha$ , then put the paper on the machine, taking care that the mark on the wrong side of the paper be in line with the mark on the canvas, the paper lying against 30 the tips, so that it will go on the ceiling square. The machine is now placed in position on the track H and pushed along to the desired position. The tips are now turned down. The front end of the machine being lightest, bears 35 against the ceiling. I now pull the lever G down, thus forcing the two parts A and B apart, and raise the rear end of frame A up against the ceiling. Thus four feet of paper is secured to the ceiling. At this point I pull in 40 the front slide. The paper being folded, as hereinbefore described, will unfold and drop by its own weight. The paper being unfolded, I now take a broom or other suitable means and place it at the end of the machine under 45 the paper and push the broom from me, carrying the paper with it, the paper taking its proper place on the ceiling and matching perfectly. The fold on the other end of the machine is put on the ceiling in the same man-50 ner. Having used all the paper on the machine, I push in the slides and release the lever or spring and lift the machine from the

track, and it is ready to receive the next strip

of paper, this operation being repeated until the room is finished.

The modification shown in Fig. 3 is, as hereinbefore described, composed of a tapering block having an eyebolt run through it. The screw-threaded part, which extends a suitable distance above the top of the block, is 60 screwed into the ceiling, and the eye on the lower end serves as a bearing for the end of the track. This track-support is to be used on extra high ceilings, where scaffolds cannot be built conveniently.

As hereinbefore stated, I fold the paper from both ends, leaving a clear unfolded surface the length of the machine, the folds rest-

ing on the slides D D.

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What I claim, and desire to secure by Let- 7c ters Patent, is—

1. A paper-hanging machine consisting of an upper and lower frame hinged together and provided with a lever or other suitable means to force them apart, said upper frame being 75 provided with longitudinal grooves in each end, and a block adapted to slide in said grooves, in which blocks are secured at suitable distances apart a number of wires forming a slide, substantially as described.

2. In a paper-hanging machine, the combination of an upper and lower frame hinged together and provided with suitable means for forcing them apart, said upper frame having grooves in each end and slides adapted to 85 work in said greezes, and a notch or guideway in the bottom of said lower frame adapted to engage with a suitable track supported by means of adjustable standards, substantially as described.

3. The combination, with adjustable standards, of a paper-supporting frame adapted to support the unfolded portion of the paper and provided with slides at each end for supporting the folded ends thereof, and means 95 for moving said frame in contact with the ceiling, whereby the central or unfolded portion of the paper may be firmly held in place while the ends are being applied, substantially as described.

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

HENRY W. MUNDHENK.

Witnesses:

J. L. Johnson, W. G. WATKINS.

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