

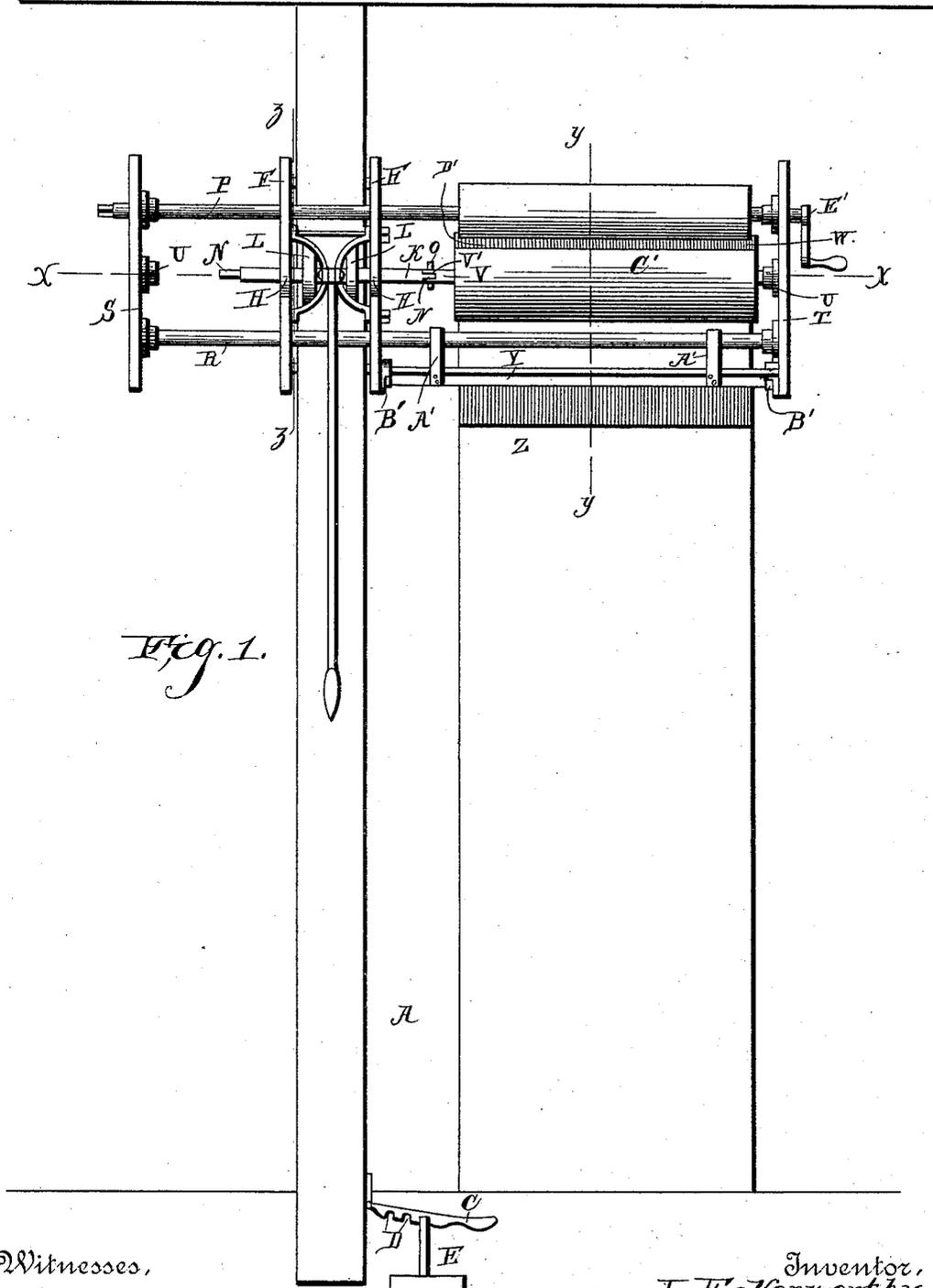
(No Model.)

2 Sheets—Sheet 1.

L. E. KENWORTHY.  
WALL PAPER HANGER.

No. 395,443.

Patented Jan. 1, 1889.



*Fig. 1.*

Witnesses,  
*Henry J. Dieterich*  
*Joel G. ...*

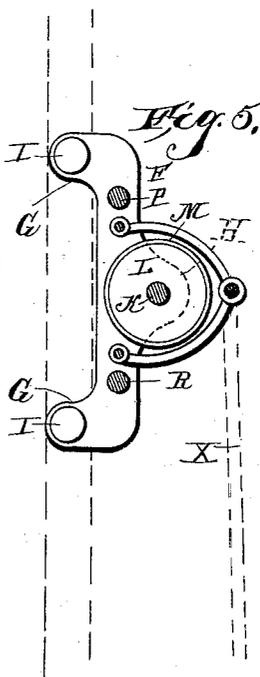
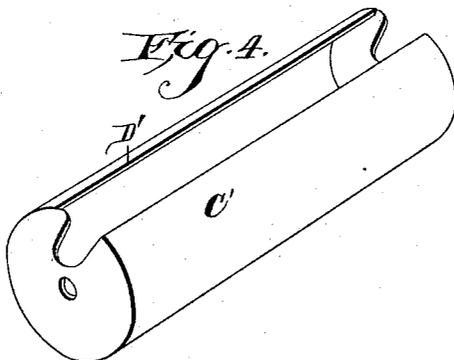
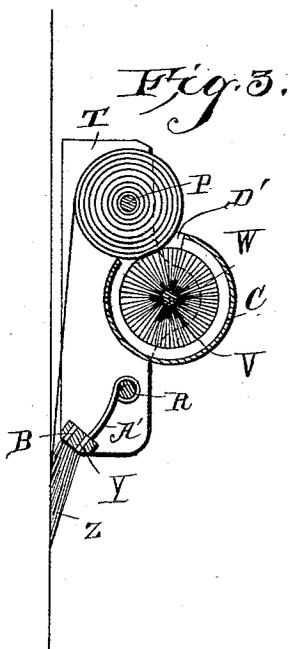
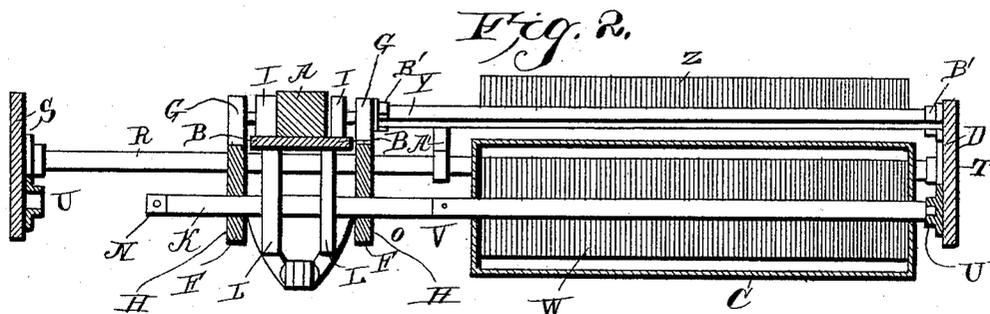
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# UNITED STATES PATENT OFFICE.

LOUIS ESTES KENWORTHY, OF ACKWORTH, IOWA.

## WALL-PAPER HANGER.

SPECIFICATION forming part of Letters Patent No. 395,443, dated January 1, 1889.

Application filed May 10, 1887. Serial No. 237,760. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS ESTES KENWORTHY, a citizen of the United States, residing at Ackworth, in the county of Warren and State of Iowa, have invented a new and useful Improvement in Wall-Paper Hangers, of which the following is a specification.

My invention relates to an improvement in wall-paper hangers; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is an elevation of a wall-paper hanger embodying my improvements. Fig. 2 is a horizontal sectional view of the same, taken on the line  $xx$  of Fig. 1. Fig. 3 is a vertical sectional view of the same, taken on the line  $yy$  of Fig. 1. Fig. 4 is a detached perspective view of the fountain or paste-trough. Fig. 5 is a vertical sectional view on line  $zz$  of Fig. 1.

A represents a vertical track or guide, which is T-shaped in transverse section, and thereby provided with projecting flanges B. Near the lower end of this guide-track is hinged a lever, C, which is provided on its under side with a series of notches or recesses, D, adapted to receive the upper end of a standard, E. The standard bears upon the floor of a room to be papered, and the lever C is shipped or fulcrumed on the upper end of the standard, and by depressing the free end of the lever the track or guide A is raised, so as to bear under the ceiling and thereby secure the guide-track in a vertical position against the wall. The operator, by keeping one foot on the depressed end of the lever, retains the track or guide in position while applying one width of paper to the wall.

F represents a pair of side plates which bear upon opposite sides of the guide-track, and are provided at their ends with projecting ears G and on their opposite sides at their centers with ears H, which project in the opposite direction from the ears G. To the inner sides of the latter are journaled bearing-rollers I, the peripheries of which impinge against the under sides of the flanges B of the track.

K represents an operating-shaft, which is journaled in transverse openings made in the

ears H. To this shaft are rigidly secured a pair of wheels, L, that are provided with peripheral rubber or leather bands M, that bear against the face of the track and thereby afford frictional contact therewith. The ends of the shaft K project beyond the opposite sides of the side plates, F, and are provided with projecting tenons N, having transverse openings adapted to receive securing-pins O.

P and R represent parallel shafts or rods, which extend through aligned openings made in the side plates, F, near the ends thereof and at equal distances from the shaft K.

S represents a plate which connects the rods P and R together at one end, and T represents a similar plate which connects the outer ends of the said rods together. On the inner opposing sides of the plates S and T, in line with the axis of the shaft K, are secured cylindrical inwardly-projecting sleeves or sockets U.

V represents a shaft which has one end journaled in the socket U, attached to the plate T, and the other end of the shaft is provided with a mortise, V', adapted to receive the projecting tenon on the inner end of the shaft K. The pin O passes through aligned openings in the mortised end of the shaft V and in the tenon on the shaft K, and thereby secures the meeting ends of the said shafts together. The shaft V is provided with radial bristles which form a cylindrical brush, W.

X represents a handle which has its upper end attached to the side plates, F, that constitute the main frame of the paper-hanger. This handle projects downwardly and outwardly from the guide-track and is adapted to be grasped by the operator, and thereby the frame may be readily moved vertically on the guide-track. It will be readily understood that when the frame is moved the wheels L, attached to the shaft K, rotate by frictional contact with the face of the guide-track, and thereby impart rotary motion to the shaft K and to the brush W.

Y represents a cross-bar which forms the head of a stiff brush, Z. The said cross-bar is suspended from the bar R by means of loops or hooks A', and the ends of the said cross-bar are secured in keepers B', attached to the opposing sides of the plates F and T.

C' represents a cylindrical paste-fountain,

which is provided at its ends with openings adapted to receive the ends of the shaft V, and thereby the said paste-fountain is suspended from the said shaft and envelops the brush W. One side of the fountain has a longitudinal opening, B', through which the bristles of the brush W project.

The ends of the shaft or rod P project beyond the outer sides of the plates S and T, and are squared and thereby adapted to fit in the socket on the crank-arm E'.

The operation of my invention is as follows: The guide-track A is erected in a vertical position, as shown, and bears against the wall to be papered, and is accurately gaged. By reason of the shafts which carry the roll of paper and the fountain and brush being extended laterally from one side of the guide-track, the latter is adapted to be placed snugly against the wall when the machine is in operation, is more easily held, and is parallel with the wall, thereby causing the brush Z to press the paper firmly to the wall with equal pressure at all times. The roll of paper to be applied to the wall is attached to the long end of the shaft P, that projects over the brush W. This causes the brush to bear against the reverse side of the paper. The operator, by means of the handle X, causes the paper-hanger to move upwardly on the guide-track, thereby imparting rotary motion to the brush W and causing the roll of paper to unroll from the shaft P and to bear firmly against the wall. As the paper unrolls, paste from the fountain is applied thereto by the rotating brush W, and the stiff brush Z, which bears upon the front side of the paper and follows the brush W, presses the pasted side of the paper firmly against the wall and smoothes out the wrinkles therein, thus securing the paper to the wall as the machine moves upward on the guide-track. When one width of paper has been thus applied to the wall, the roll is cut when it reaches the ceiling, and the guide-track is moved to one side a distance corresponding to the width of the paper and again secured in position, as before. The paper-hanger is lowered to the floor, and the operation before described is repeated to apply the second roll of paper to the wall, and so on until the wall is completed.

The rods P and R are adapted to move endwise in the side plates, F, of the main frame, and as the brush W and the brush Z and the fountain are detachable it will be readily understood that the movable frames, com-

prising the rods P and R and the end plates, S and T, may be projected from either side of the guide-track, so as to cause the pasting devices to operate on either side thereof.

Cog-gearing may be substituted for the friction devices as a means for guiding the machine.

Having thus described my invention, I claim—

1. In a machine for hanging wall-paper, the combination of the track or guide A, having the flanges B projecting from opposite sides of its face, the frame having the rollers I I bearing against the inner sides of the flanges, the shaft P, projecting laterally from one side of the frame and to which the roll of paper is adapted to be secured, the shaft K, journaled in said frame, projecting laterally from one side thereof, and having the rotating brush W, to bear against the roll of paper, and the wheels L L, engaging the outer side of the track, the fountain to supply paste to the brush, and the smoothing-brush Z, substantially as described.

2. In a paper-hanging machine, the combination, with the guide-track, of the traveling frame thereon and projecting from one side of the track, the main shaft K, journaled in the frame and having the wheels L engaging the track, the shaft P for the roll of paper, journaled in the frame, the rod R, secured to the frame, (said shaft P and rod R being on opposite sides of the main shaft,) the rotating brush W, secured to the main shaft, the fountain, and the smoothing-brush Z, attached to shaft R, substantially as specified.

3. In a paper-hanger, the combination of the guide-track, the main frame adapted to slide thereon, and having the main shaft K, provided with the wheels L, engaging the track, the said shaft having the projecting ends on opposite sides of the main frame, the shaft P, journaled in the main frame and adapted to slide longitudinally therein, the rod R, secured to the main frame and also movable longitudinally, the brush W, adapted to be attached to either end of the shaft K, and the brush Z, adapted to be secured to either end of the rod R, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

LOUIS ESTES KENWORTHY.

Witnesses:

JOHN B. GARDNER,  
A. L. OGG.