W. HAYES.

MACHINE FOR APPLYING ADHESIVE TO, TRIMMING, AND HANGING WALL PAPER.

APPLICATION FILED DEC. 13, 1919.

1,356,716. Patented Oct. 26, 1920.

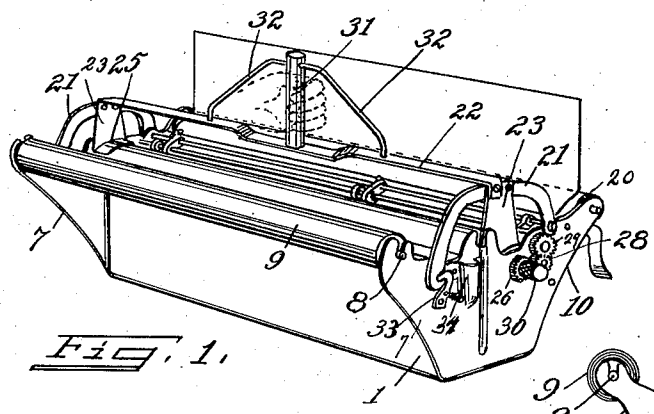


Fig. 1.

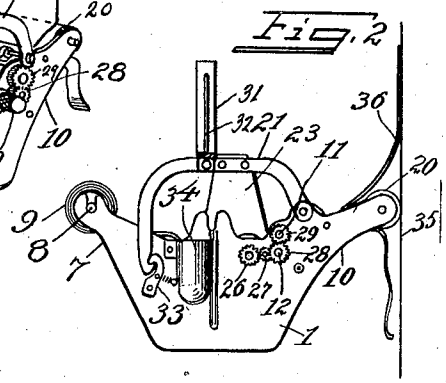


Fig. 2.

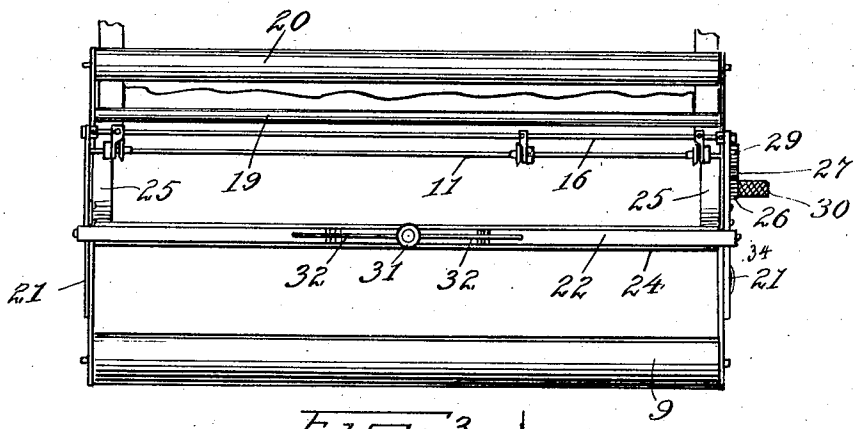


Fig. 3.

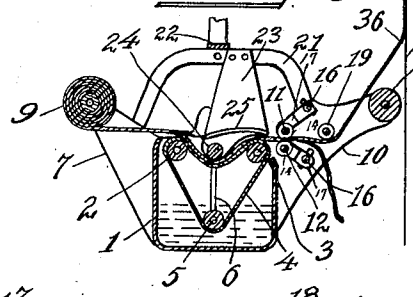


Fig. 4.

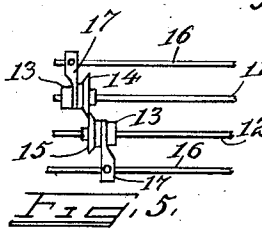


Fig. 5.

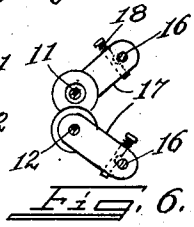


Fig. 6.

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MACHINE FOR APPLYING ADHESIVE TO, TRIMMING, AND HANGING WALL-PAPER.

1,356,716. Specification of Letters Patent. Patented Oct. 26, 1920.

Application filed December 13, 1919. Serial No. 344,663.

To all whom it may concern:

Be it known that I, WILLIAM HAYES, a citizen of the United States, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Machines for Applying Adhesive to, Trimming, and Hanging Wall-Paper, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

The present invention relates to improvements in machines for applying adhesive to wall paper, trimming the edges thereof, and for facilitating application of the same to a wall or ceiling.

The principal object of the present invention is to provide a machine of the character designated of simple and efficient construction, and one which at the same time may be conveniently handled for the application of paper, suitably provided with adhesive and trimmed, to a wall or ceiling.

A further object of the invention is to provide in a machine of the character mentioned means whereby the end of a roll of paper may be conveniently inserted in the machine to begin the feeding thereof.

A further object of the invention is to provide in a wall papering machine, adjustable means for trimming the paper, whereby the same may be cut or trimmed to any required dimension.

Further objects of the invention will appear from the following detailed description thereof.

In the drawings:

Figure 1 is a perspective of my new machine.

Fig. 2 is an end view thereof.

Fig. 3 is a plan view of the machine.

Fig. 4 is a cross section of the machine.

Fig. 5 is a detail of the portion of the trimming mechanism.

Fig. 6 is a side view of the same.

The numeral 1 indicates a receptacle or a tank of suitable shape and size. Mounted in bearings in the ends of the receptacle 1, near the upper portion thereof, are rollers 2 and 3, around which a continuous web or belt 4 is arranged to operate. A weighted roller 5, mounted in grooved bearings 6 in the end walls of the receptacle, is arranged to hold the lower section of the web 4 near the bottom of the receptacle so that the said web is caused during movement to pass through the contents of the receptacle.

The end walls of the receptacle 1 are provided with lateral extensions 7, the upper ends of which are slotted to receive a shaft 8, upon which a roll of wall paper 9 is mounted. The opposite sides of the end walls of the receptacle are also provided with extensions 10, within which are mounted shafts 11 and 12, upon which are mounted heads 13, carrying opposed disk cutters 14 and 15 arranged in pairs, to engage as shown in Fig. 5. The shafts 11 and 12 are provided with key-ways as shown in Fig. 6 and the cutter heads 13 are keyed thereto, so that the cutter heads, while slidable on the shafts for adjustment, are also rotatable therewith. Mounted between the extensions 10 to the rear of the shafts 11 and 12 are fixed rods, 16, on which arms 17 which engage in grooves in the cutter heads are mounted. The arms 16 serve for adjusting the cutter heads, and also for rigidifying the construction, and said arms are provided with spring pressed pins 18 for maintaining the arms in fixed position on the rods 16. Rotatably mounted between the extensions 10 to the rear of the rods 16, and approximately between the same, is a roller 19. A tracking roller 20 is also rotatably mounted between the extensions 10 at the end thereof.

Pivotally secured to the extensions 10, above the receptacle, is a frame composed of curved bars 21 and a longitudinal connecting bar 22. The bars 21 are provided with depending plates 23 between the lower ends of which a roller 24 is mounted, the position of such roller being, when the frame is in the position shown, in full lines throughout the drawings, such as to press downwardly against the web 4 between the rollers 2 and 3. Guide plates 25 are mounted on the lower ends of the plates 23 and extending inwardly a short distance for the purpose hereinafter set forth. Spring pressed hooks 33 on the ends of the casing engage notches on the bars 21 to hold the frame in the position shown in full lines in the drawings.

Secured on the end of roller 3 outside the receptacle is a spur gear 26 arranged to engage with a pinion 27 rotatably mounted on a stud on the end of the receptacle. The pinion 27 intermeshes with a gear 28 on the outer end of cutter shaft 12, and the gear

28 intermeshes with a similar gear 29 on shaft 11. The outer end of the shaft of the roller 3, beyond the gear 26 is provided with a knurled extension 30, for the purpose hereinafter set forth.

Secured on the longitudinal bar 22 is a handle 31, rigidified by brackets 32.

The receptacle is provided at one end with a filling spout 34.

The operation of the device is as follows: A roll of paper is mounted between the extensions 7 of the receptacle and the end of said paper is placed upon the web 4 over the rollers 2 and 3, the superposed frame having been raised to permit this to be done. The end of the paper will of course adhere to the web, the latter having been provided with adhesive during its movement through the receptacle. The frame is then lowered, the roller 24 and guide plates 25 securing and directing the paper. The operator then rotates the roller 3 by means of the knurled extension 30, which carries the end of the paper between cutters on shafts 11 and 12, which are rotated by the gearing described, and which, it is to be understood, have been suitably adjusted for the desired trimming. The end of the paper then passes under roller 19 and is free to be withdrawn thence for application. After the paper has been inserted the frame is brought down and locked by means of the hook 33, in which position, as above set forth, the roller 24 bears downwardly and holds the paper in contact with the web. The paper may then be withdrawn by hand by the operator, it being supplied with adhesive and being trimmed during the process as will be apparent. In the use of the machine, however, it is desirable that the operator hold the same by means of the handle 31 in such position that the roller 20 tracks against a wall 35. The free end of the paper 36 is then placed against the wall above the roller 20, and the machine is slowly lowered, the operator at the same time, by means of a brush or otherwise, pressing the paper against the wall in the usual manner.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is:

1. A machine of the character described comprising in combination with a tank for adhesive, rollers mounted in said tank, a web operable on said rollers through the adhesive in said tank, and means for supporting a roll of wall paper, a frame pivotally mounted on said tank, a roller mounted in said frame and arranged when said frame is in its lowermost position to bear against said web between rollers in the tank to cause paper from the roll to contact with said web to receive a coat of adhesive, and adjustable cutters mounted in connection with the tank for trimming the paper after it has received a coat of adhesive.

2. A machine of the character described comprising in combination with a tank for adhesive, rollers mounted in said tank, a web operable on said rollers through the adhesive in said tank, and means for supporting a roll of wall paper, a frame pivotally mounted on said tank, a roller mounted in said frame and arranged when said frame is in its lowermost position to bear against said web between rollers in the tank to cause paper from the roll to contact with said web to receive a coat of adhesive, adjustable cutters mounted in connection with the tank for trimming the paper after it has received a coat of adhesive, and guide plates on said frame and arranged to guide the end of the paper from the web to said cutters.

3. A machine of the character described comprising in combination with a tank for adhesive, rollers mounted in said tank, a web operable on said rollers through the adhesive in said tank, and means for supporting a roll of wall paper, a frame pivotally mounted on said tank, a roller mounted in said frame and arranged when said frame is in its lowermost position to bear against said web between rollers in the tank to cause paper from the roll to contact with said web to receive a coat of adhesive; adjustable cutters mounted in connection with the tank for trimming the paper after it has received a coat of adhesive, and a handle for manipulating said machine in relation to a wall for attaching the paper thereto.

4. A machine of the character described comprising in combination with a tank for adhesive, rollers mounted in said tank, a web operable on said rollers through the adhesive in said tank and means for supporting a roll of wall paper, a frame pivotally mounted on said tank, a roller mounted in said frame and arranged when said frame is in its lowermost position to bear against said web between rollers in the tank to cause paper from the roll to contact with said web to receive a coat of adhesive; adjustable cutters mounted in connection with the tank for trimming the paper after it has received a coat of adhesive; guide plates on said frame and arranged to guide the end of the paper from the web to said cutters, and a handle for manipulating said machine in relation to a wall for attaching the paper thereto.

5. A machine of the character described comprising in combination with a tank for adhesive, rollers mounted in said tank, a web operable on said rollers through the adhesive in said tank, and means for supporting a roll of wall paper, a frame pivotally mounted on said tank, a roller mounted in said frame and arranged when said frame

is in its lowermost position to bear against said web between rollers in the tank to cause paper from the roll to contact with said web to receive a coat of adhesive; adjustable cutters mounted in connection with the tank for trimming the paper after it has received a coat of adhesive, a handle for manipulating said machine in relation to a wall for attaching the paper thereto, and a tracking roller to operate against said wall.

6. A machine of the character described comprising in combination with a tank for adhesive, rollers mounted in said tank, a web operable on said rollers through the adhesive in said tank, and means for supporting a roll of wall paper, a frame pivotally mounted on said tank, a roller mounted in said frame and arranged when said frame is in its lowermost position to bear against said web between rollers in the tank to cause paper from the roll to contact with said web to receive a coat of adhesive, adjustable cutters mounted in connection with the tank for trimming the paper after it has received a coat of adhesive, guide plates on said frame and arranged to guide the end of the paper from the web to said cutters; a handle for manipulating said machine in relation to a wall for attaching the paper thereto and a tracking roller to operate against said wall.

WILLIAM HAYES.