W. J. DUNN & H. B. TAYLOR.

WALL PAPER HANGING DEVICE.

APPLICATION FILED DEC. 12, 1910.

1,046,744.

Patented Dec. 10, 1912.

2 SHEETS—SHEET 1.

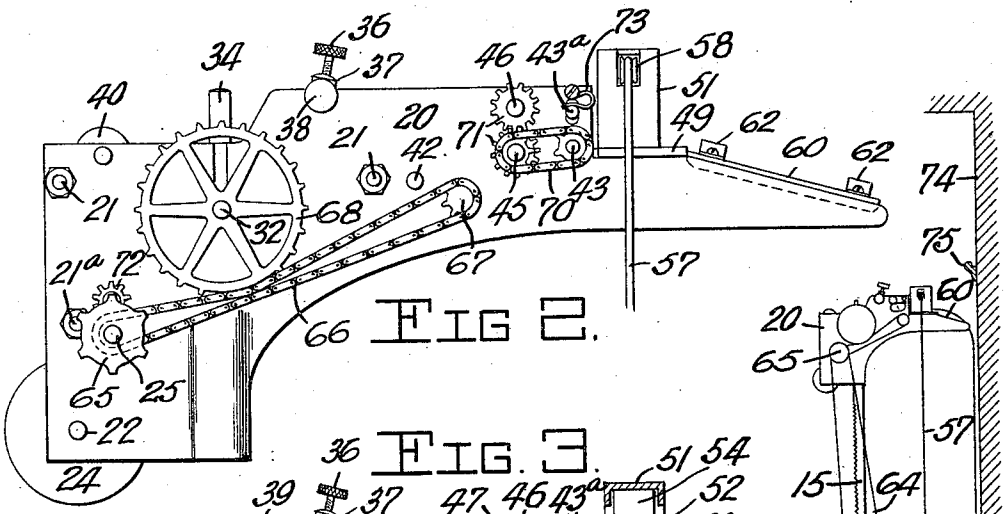

FIG 2.

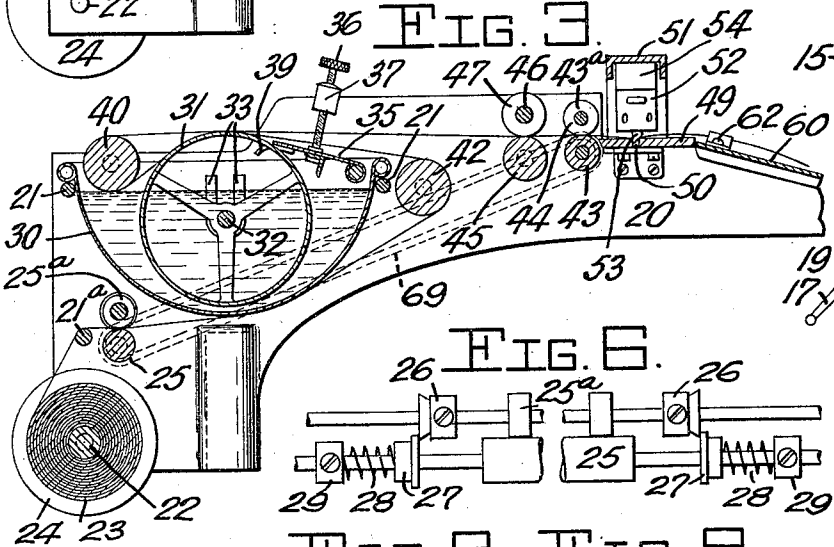

FIG. 3.

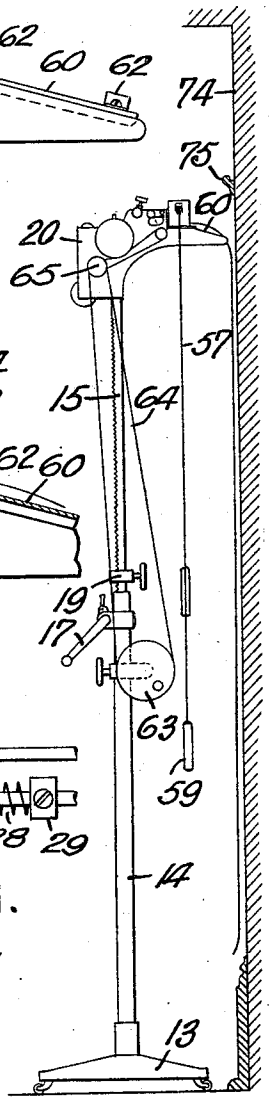

FIG. 1.

FIG. 6.

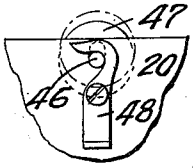

FIG. 8.

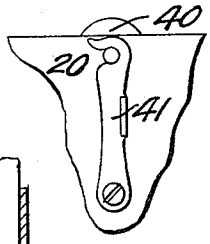

FIG. 9.

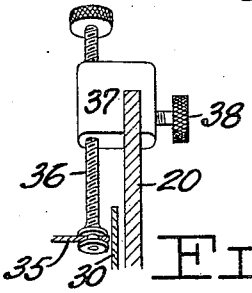

FIG. 7.

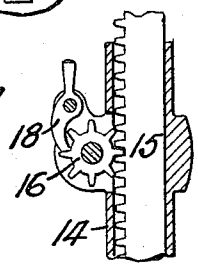

FIG. 10.

WITNESSES

Stuart R. W. Allen

O. R. McKenzie

INVENTORS

WILLIAM J. DUNN.

HENRY B. TAYLOR.

By Fred D. Fetherstonhaugh & Co.

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

W. J. DUNN & H. B. TAYLOR.

WALL PAPER HANGING DEVICE.

APPLICATION FILED DEC. 12, 1910.

1,046,744.

Patented Dec. 10, 1912.

2 SHEETS—SHEET 2.

FIG. 4.

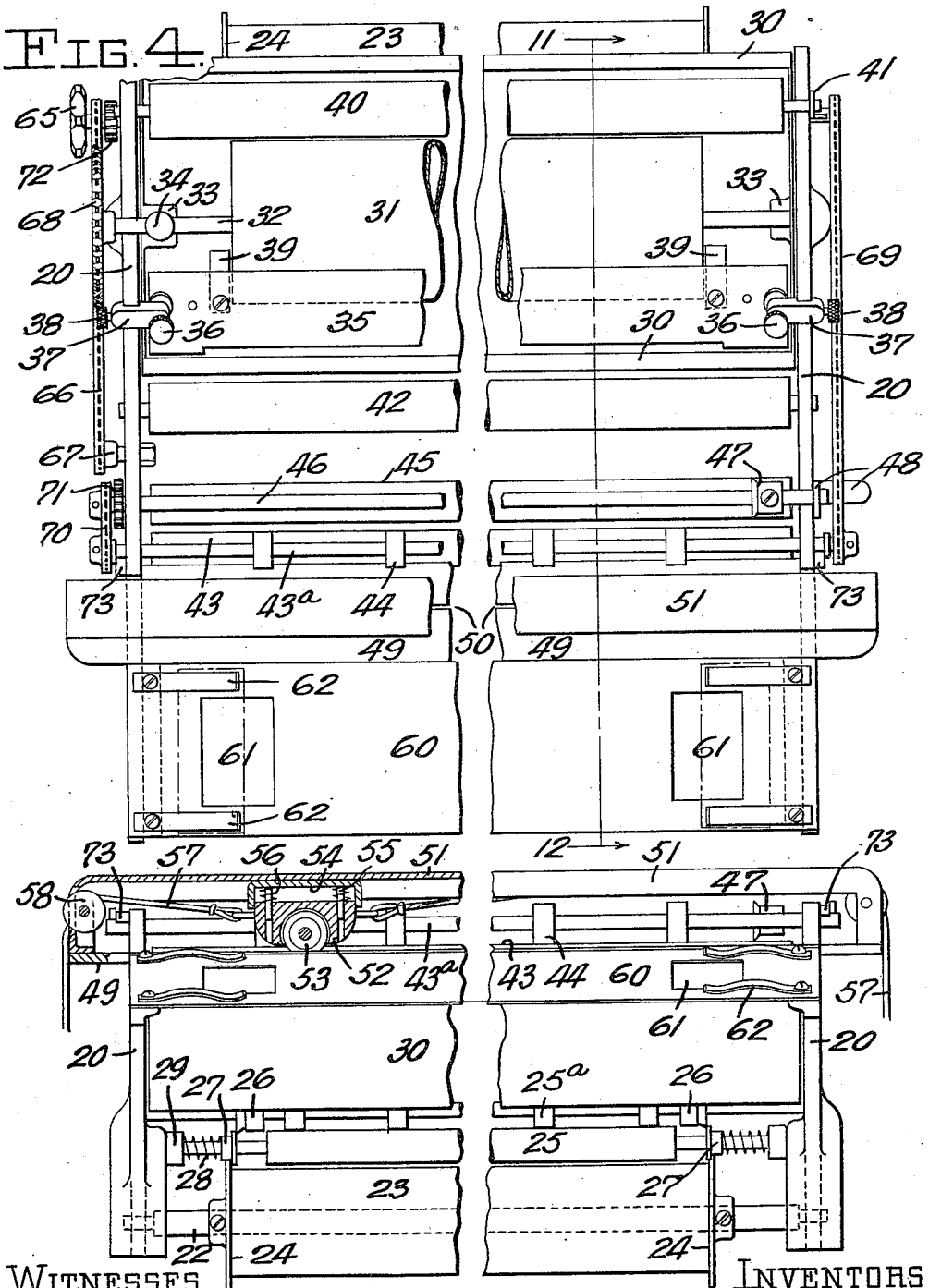

FIG. 5.

WITNESSES

Stuart R. Wallace

E. R. McKenzie

INVENTORS

WILLIAM J. DUNN.

HENRY B. TAYLOR.

By Fred B. Fetterstonehaugh Atty.

UNITED STATES PATENT OFFICE.

WILLIAM J. DUNN AND HENRY B. TAYLOR, OF MONTREAL, QUEBEC, CANADA, ASSIGNORS TO STANDARD MACHINES LIMITED, OF MONTREAL, CANADA.

WALL-PAPER-HANGING DEVICE.

1,046,744. Specification of Letters Patent. Patented Dec. 10, 1912.

Application filed December 12, 1910. Serial No. 596,980.

To all whom it may concern:

Be it known that we, WILLIAM J. DUNN and HENRY B. TAYLOR, of the city of Montreal, in the Province of Quebec and Dominion of Canada, have invented certain new and useful Improvements in Wall-Paper-Hanging Devices, and do hereby declare that the following is a full, clear, and exact description of the invention.

This invention relates to improvements in wall paper hanging devices and the objects are to provide a simple and comparatively inexpensive machine which will quickly and accurately trim, paste, and hang the paper, and at the same time match the pattern and cut the paper transversely when ready for application. To accomplish these objects, an extensible support is provided, adapted to stand on the floor, having at the top thereof a suitably operated paper handling device, comprising, a paper roll support, feed rolls having trimmers at the ends thereof, a paste reservoir containing a revolving drum over which the paper passes, and a pair of discharge rollers. A manually operated cutter is provided for severing the trimmed and pasted paper when the same is adjusted to position on the wall.

Referring to the drawings:—Figure 1 is a side elevation of the device in operation. Fig. 2 is an enlarged side elevation of the paper handling device. Fig. 3 is a section of the same on the line 11—12 of Fig. 4. Fig. 4 is a plan view of the paper handling device. Fig. 5 is a front elevation of the same, partly in section. Fig. 6 is an elevation of the feed rolls showing the trimmers. Fig. 7 is a detail of the scraper adjusting means. Fig. 8 is a detail of the splitting cutter clamp. Fig. 9 is a similar view of the idler roll latch. Fig. 10 is a view of the support extending device.

In the drawings, 13 designates the base, 14 the lower tubular members, and 15 the upper toothed members of the support which slide within the former. A small gear 16 is mounted near the top of each member 14 and meshes with the toothed member 15. A crank 17 is provided to rotate the gears and raise the members 15, pawls 18 being provided to hold the gears against revolution, in a reverse direction. An adjustable collar 19 is provided on each member 15 for accurately adjusting the same.

At the upper ends of the members 15, are a pair of similar plates 20, connected by stop bolts 21 and 21ª, to form the framework of the paper handling device. At the back of the framework a spindle 22 is suitably mounted to support a paper roll 23, adjustable plates 24 being provided on the spindle for positioning the paper roll. Paper from the roll passes over the stay 21ª and between the lower and upper feed rolls 25 and 25ª, at the ends of which adjustable trimmers are mounted. Each trimmer comprises a collar 26 adjustably mounted on the upper feed roll 25ª, and a second collar 27 on the lower feed roll is pressed by a spring 28 against the upper collar to form shears which trim the margin of the paper and leave the edges smooth and parallel, in order that the paper may be hung with the edges abutting, rather than overlapped. Adjustable collars 29 on the lower feed roll regulate the compression of the spring 28.

A paste reservoir 30 is supported by the stay bolts 21 and contains a partially submerged roller 31, mounted on a shaft 32 supported in slotted bearings 33. The shaft passes through one end of the paste reservoir and through the framework, the bearing at this end being provided with a plug 34 to close the shaft slot and prevent the escape of paste. An adjustable scraper 35 is hinged to the front edge of the reservoir to regulate the amount of paste delivered by the roll 31. The adjusting device consists of a screw 36 revolubly attached to each end of the scraper and threaded through a slotted block 37 embracing the framework and fixed thereto by a set screw 38. By turning the screws 36, the scraper may be raised or lowered, or by loosening the set screws 38 the scraper may be thrown up without disarranging any adjustment. Downwardly curved fingers 39 are attached to the rear edge of the scraper and engage the ends of the roll 31 and scrape the paste therefrom so that surplus paste will not be deposited at the edges of the paper where it would squeeze through the joint when the paper is pressed against the wall. To the rear of the paste roller, is a removably mounted idler roll 40 which is held by a latch 41. The paper, after passing the feed rolls, travels forward around an idler roll 42, back over the paste roll, around the idler roll 40, and forward to the lower and upper discharge rolls 43 and 43ª, the latter of

which is in the form of a plurality of spaced disks 44. This upper roll 43ª engages the pasted surface of the paper and, therefore, the contact surface is as small as possible so as to displace a minimum of the paste.

Before passing between the discharge rolls, the paper passes over a solid metal roller 45, above which is a shaft 46 carrying an adjustable cutting wheel 47, adapted to split the paper into strips of any width, when working around doors and windows, or in corners. A clamp 48 is provided at one end of the shaft 46 whereby the cutter may be pressed down on the roll 45.

Toward the front of the machine, is a transverse cutting table 49 having a slot 50 therein. Above the table is a housing 51 within which is a small carriage 52 running on a cutting wheel 53, adapted to engage with one edge of the slot 50 to form shears for cutting the paper transversely. The slot also acts as a track for the carriage which is held in close contact therewith by a plate 54 mounted above the carriage on posts 55 and pressed against the housing by springs 56. The carriage is shifted by cords 57 of equal length attached to the ends thereof and passing out of the end of the housing over pulleys 58. Weighted handles 59 are provided at the ends of said cords.

At the extreme front of the machine, is an inclined table 60 having an aperture 61 adjacent each end thereof, over which a sample of the paper used may be held by spring fingers 62 so that the pattern will be visible from below. By matching the first strip cut with this sample, the operator will be enabled to cut all other strips at the proper point without the necessity of matching with the paper already hung, by simply matching with the sample.

The rotation of the various rolls and cutters is preferably effected as shown. A drive pulley 63 is adjustably mounted on one of the lower members 14 of the support and is connected by a belt 64 with a pulley 65 on the lower feed roll 25. On one side of the machine, a belt 66 runs between this roll and an idler 67, and drives the sprocket 68 on the shaft 32 of the paste roller. On the other side of the machine, a belt 69 connects the lower feed and discharge rolls. The rolls 43 and 45 are connected by a belt 70, and the shaft 46 is driven from the roll 45 by gears 71. The upper feed roll 25ª is driven from the lower by gears 72. The upper discharge roll drives by friction, C-springs 73 being provided to force it down on the lower discharge roll.

In setting up the machine, the paste reservoir is filled and the paper fed through, as shown in Fig. 3. The device is placed against the wall 74 to be papered, and the support extended until the paper handling device is raised to such a height that the distance from the front edge of the table 60 to the picture molding 75 is equal to the distance from said edge to the slot 50, in order that the paper, when cut at the slot, will turn up and exactly reach the picture molding. The operator rotates the driving pulley until a sufficient length of trimmed and pasted paper is delivered, the pattern being matched with a sample previously placed over the openings 61. This matching is easily accomplished owing to the inclination of the table 60 which allows the operator to stand a short distance from the wall and look perpendicularly at the paper over the apertures 61. The samples cover the outer half of each aperture and the edges of the paper cover the inner halves. The paper is pressed against the wall sufficiently to hold the same in place, and the operator pulls the upper handle 59 and draws the carriage across the paper to sever same. The strip is pressed into place and all succeeding strips treated in the same manner.

The operation of the paper handling device and its treatment of the paper will be readily understood from the foregoing description.

Having thus described our invention, what we claim is:—

1. A paper hanging machine comprising an adjustable support, a paper pasting and trimming device mounted on said support, an inclined plate having apertures therein positioned to expose the pattern of the paper, and clamps for holding a sample of the paper over said apertures.

2. A paper hanging machine comprising a telescoping support having a toothed upper member, a pinion engaging the upper member, a pawl locking said pinion, a collar on said upper member, means for clamping the collar thereto to lock the support independently of the pawl, a paper pasting and trimming device mounted on the support, and means on said support for holding a pattern sample in position to match the pattern of the paper therewith.

3. A paper hanging machine comprising a vertically adjustable support, a framework at the top thereof, containing a paper roll support at the rear, a pasting device thereabove, paper edge trimmers between the paper roll and pasting device, a transverse paper cutting knife adjacent the front of the machine, and an auxiliary cutter between the transverse cutter and pasting device adjustable to cut trimmed paper longitudinally.

4. A paper hanging machine comprising a vertically adjustable support, a framework at the top thereof containing a paper pasting and trimming device, and means for holding a pattern sample in position to match the pattern of the paper therewith, a scraper for regulating the amount of paste

delivered by the pasting device, means carried by the framework for adjusting the scraper, and means for disconnecting said adjusting means from the framework.

5. A paper hanging machine comprising a suitable support, a vertically adjustable paper carrier mounted at the top of said support comprising paper edge trimming knives, a paper pasting device, a transverse paper cutting knife, an auxiliary adjustable paper cutting knife, a plate apertured to expose the edges of the paper, and means for holding pattern samples over said apertures whereby the pattern of the paper may be matched with said samples.

6. A paper hanging machine comprising a telescoping support, means for vertically adjusting the support, a collar for locking said support at any adjustment, a paper carrier mounted at the top of said support comprising paper edge trimming knives, a paste reservoir, a roller therein, a scraper for said roller, adjusting means for the scraper, a transverse paper cutter, an inclined plate having apertures therein to expose the paper edges, and clamps for holding a sample of the paper over said apertures whereby the pattern of the paper may be matched prior to the cutting off operation.

7. A device of the character described comprising an adjustable support, a paper pasting and trimming device mounted on said support, and a sample carrying plate apertured at such points as will render the sample and paper to be hung coincidently visible.

8. A paper hanging machine comprising an adjustable support, a paper pasting and trimming device mounted on said support, a transverse paper cutter, a plate apertured at such points as will render the edges of the paper visible, and means for holding samples of the paper over said apertures.

9. A paper hanging machine comprising an adjustable support, a paper pasting and trimming device mounted on said support, a transverse paper cutter, an apertured plate having the apertures thereof arranged to disclose the pattern of the paper to be hung, means for holding sample patterns over said apertures in known relation to the paper already hung whereby the paper to be hung may be adjusted to match the paper already hung.

In witness whereof we have hereunto set our hands in the presence of two witnesses.

WILLIAM J. DUNN.
HENRY B. TAYLOR.

Witnesses:
C. W. TAYLOR,
E. R. MCKENZIE.