W. H. Guthrie.

Mach. for Trimming Wall Paper.

No. 83,709. Patented Nov. 3, 1868.

Fig. 1

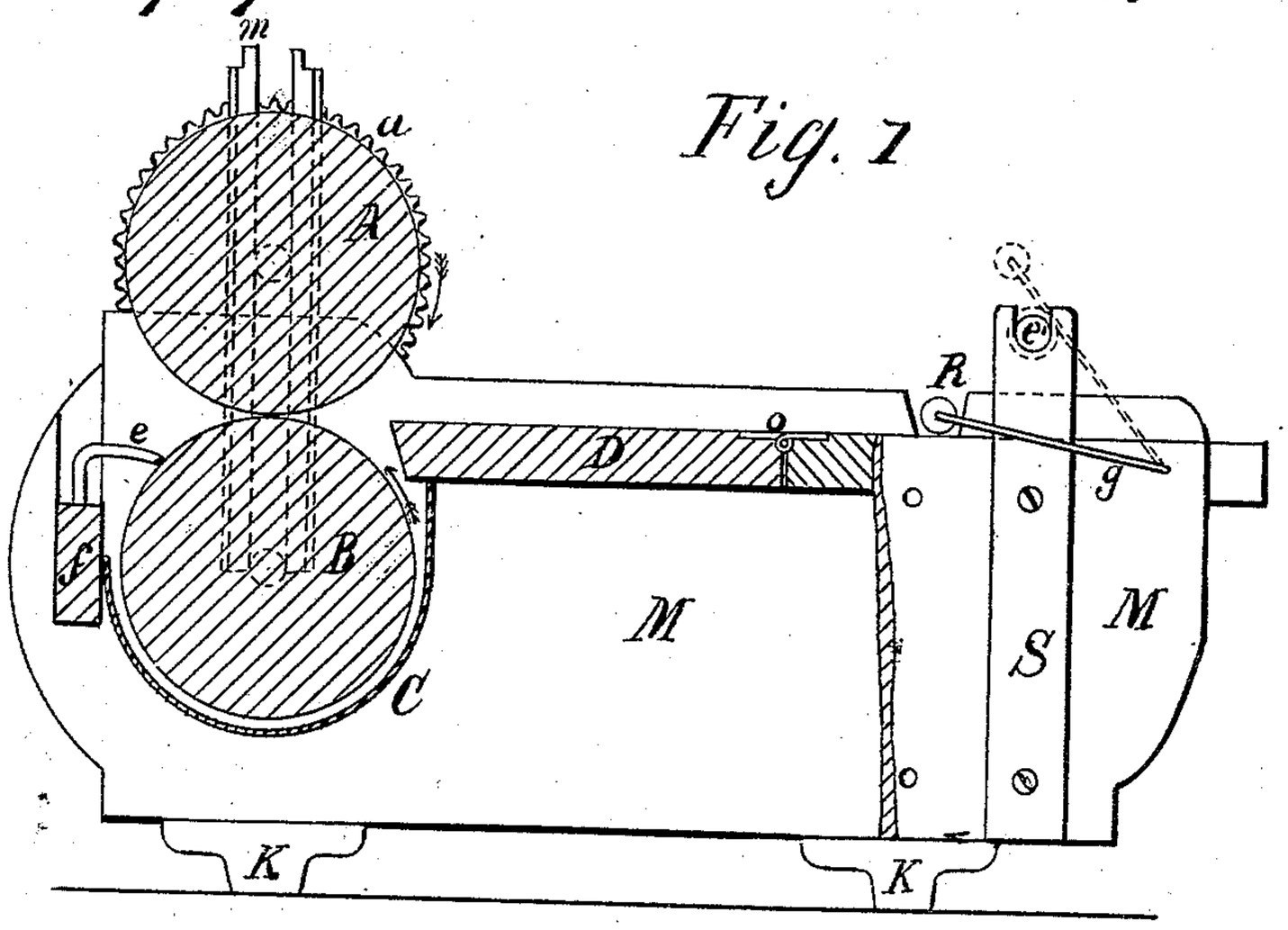
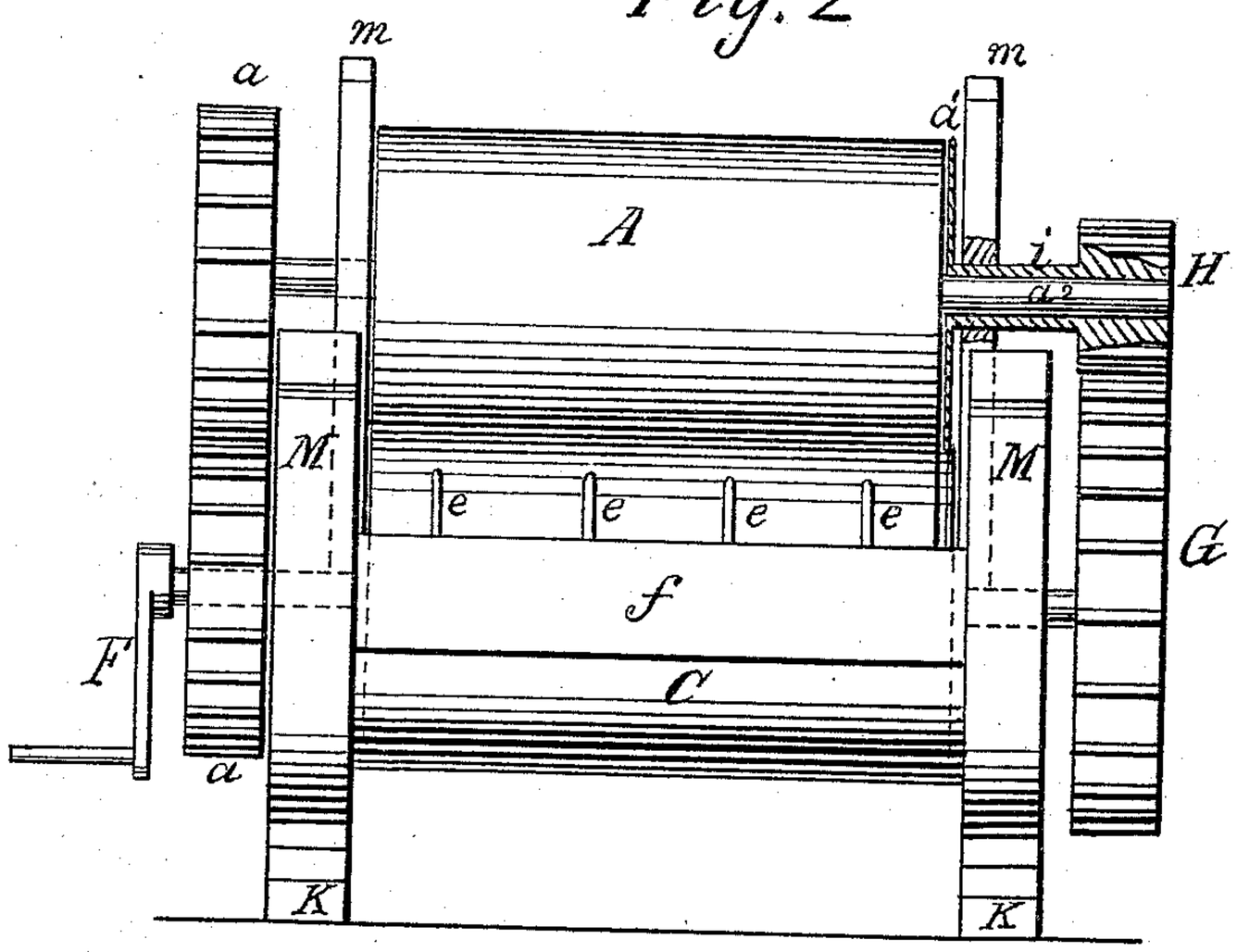


Fig. 2



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Letters Patent No. 83,709, *dated November* 3, 1868; *antedated October* 24, 1868.

MACHINE FOR TRIMMING WALL-PAPER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WARREN H. GUTHRIE, of Brooklyn, in the county of Kings, and State of New York, have invented a new and improved Machine for Pasting and Trimming Wall-Paper; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved method of constructing machines for pasting and trimming wall-paper or paper-hangings, whereby the same are automatic in their operation, and whereby much time and labor are saved in hanging wall-papers.

It consists of two feed-rollers, the under of which said rollers, rotates in a paste-box, which distributes paste upon the paper while the same is passing through the rollers; and it consists also of a circular knife or cutter, rotating on the shaft of the upper roller, driven at any desired speed by gearing from the lower roller, by means of which the edge of the paper is trimmed while the same is passing through the rollers.

In the accompanying plate of drawings—

Figure 1 represents a side view of my invention, a portion of the frame broken away to show the construction.

Figure 2 is an end view of the same.

Similar letters of reference indicate corresponding parts.

A is the upper roller.

B is the lower roller.

m are supports for rollers A and B.

a are spur-gear wheels, by means of which a rotary motion is transferred from the roller B to the roller A.

e are arms or projecting points, to prevent the paper, when pasted, from adhering to the roller B.

f is a cross-bar, to support the arms *e*.

C is a paste-box, within which roller B rotates.

D is a portion of the table attached to the other portion by hinge *o*.

e' is a guide-roller.

R is a binding-roller, to hold the paper on to the roller *e'*.

g is a frame or arms, in which the roller R rotates.

G is a spur-gear wheel, attached to shaft of roller B.

H is a spur-gear pinion, rotating on the axle a^2, and connecting with the cutter a^1.

a^1 is a circular cutter.

a^2 is a part of the shaft of roller A, on which the pinion H rotates.

F is the handle attached to roller B, by means of which the whole is driven.

M is the frame.

K are the feet.

The frame M is composed of two sides, of sufficient distance apart to receive the paper, having a cross-piece or table between and below one of such sides, so as to leave an edge or rim above the table, which serves as a guide for the paper, and against which said rim or edge the paper runs.

To said table, as shown in the drawing, is secured, by the hinge *o*, a lid, D, which, when down, as shown in the drawing, becomes a portion of the table, and which may be raised, when necessary, for removing the roller B.

The frame M is not entirely covered by the table and lid D, but extends beyond the same, to receive and support the rollers A and B.

In each side of said frame M, and near the end of the same, is a vertical dovetail-shaped slot, and in said slot is fitted a dovetail-shaped upright or support, *m*, provided in the lower end of the same with a slot to receive the journals of the shaft of the roller B. Both sides of the frame M are provided with a slot, in which the journal of the roller B turns, so that said roller B may, when occasion requires, be taken out.

The upright, *m*, is also provided at the upper end of the same with a slot, in which the journal of the roller A turns, so that said roller A may at any time be taken out. The rollers A and B are of the common form of feed-rollers, and may be made of wood or other suitable material, the under roller B being covered with cotton or other suitable material, so as to absorb the paste from the paste-box C. Said rollers A and B have through them a shaft, in the usual way, provided with journals; said shafts extending through the sides of the frame M and the upright, *m*, so as to receive upon the same the spur-gear wheels *a*, and the spur-gear wheel G, and pinion H, and crank F, as shown in the drawing.

A crank or handle, F, is attached to the shaft of the roller B, by which it is driven, and upon the said shaft is a spur-gear wheel, *a*, fitting into another spur-gear wheel *a* upon the shaft of the roller A. Upon the other end of the shaft of roller B is a spur-gear wheel, G, fitting into the pinion H. Upon the same end of the shaft a^2 of the roller A, is a spur-gear pinion, H, which turns upon the shaft a^2. To the inner end of the hub of the pinion H is rigidly secured a circular cutter or knife, a^1, so arranged that the pinion H and cutter a^1 will revolve around the shaft a^2, the edge of the cutter a^1 bearing on the lower roller B, so as to cut through the paper as it is fed through the rollers, thereby trimming the same to a uniform width throughout.

The gear-wheel G is larger, and has more teeth than the gear-pinion H, whereby the pinion H and cutter *i* are driven at a greater speed than the rollers A and B.

Under the roller B, and conforming somewhat thereto in shape, is a box, C, to contain paste, secured to and between the sides of the frame M, in a groove in said sides, or other convenient manner.

Upon the ends of the frame M, and extending across from one side to the other, and secured thereto in any suitable manner, or let into a groove in the same, as

shown in the drawing, is a cross-piece or cross-bar, *f*; upon which is any convenient number of arms or projecting points, projecting in so far as nearly to touch the top of the roller B, as shown in the drawing, fig. 1; the object being to prevent the pasted paper from adhering to the said roller B.

Upon the outside of the frame M are attached two uprights or supports S, one upon each side of said frame, at any convenient distance from the rollers A and B. In the upper end of the uprights S are slots to receive the journals of a roller, *e'*. On the outside of said frame, and pivoted to the same, one on each side, are two swinging arms *g*, to the ends of which is pivoted the roller R, serving as a binder to hold the paper down on the roller *e'*, and upon the table; a notch being cut in the edge of said table, to allow said roller R to come down upon said table, as shown in the drawing. The whole is supported by suitable feet K.

The operation is such that, the paste-box C being filled with paste, a strip of wall-paper is placed upon the roller *e'*, and under the roller R, and against the edge or rim of the table, one end being carried in between the rollers A and B. When the roller B is turned by the crank F, the paper is drawn in between said rollers A and B, and under the cutter a^1, whereby the edge of the paper is trimmed off, and the paste, taken up by the roller B from the box C, is distributed upon the under surface of said paper.

Constructed as above described, it constitutes a convenient automatic machine for pasting and trimming wall-paper, whereby much time and labor are saved.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. An automatic machine for pasting and trimming wall-paper, substantially as shown and described.

2. A circular rotating cutter a^1, in combination with the rollers A and B, substantially as shown and described, and for the purposes set forth.

3. The pasting-roller B, in combination with the roller A and paste-cup C, substantially as shown and described, and for the purposes set forth.

4. The lifting-lid D, in combination with the frame M, substantially as shown and described.

5. The roller *e'*, in combination with the binding-roller R, and frame M, and rollers A and B, substantially as shown and described, and for the purpose set forth.

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Witnesses:

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