

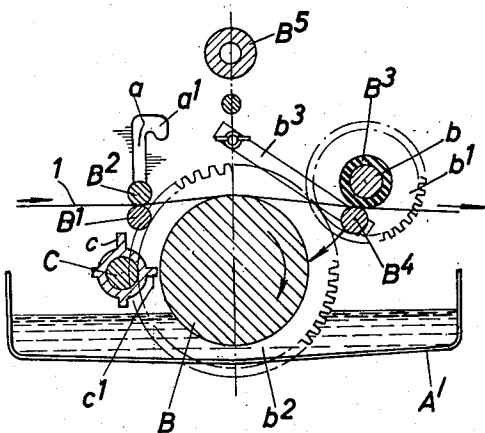
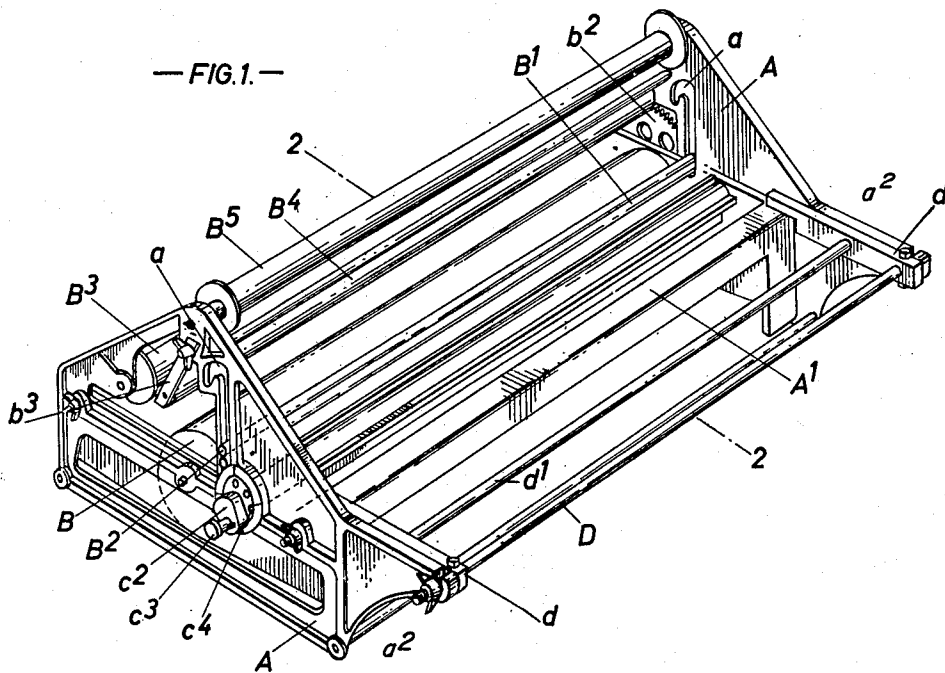
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N. HIGGINSON

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WALL PAPER PASTING AND PAPER HANGING APPARATUS

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INVENTOR:  
Norman Higginson  
BY  
Michael S. Stokes  
Attorney

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## WALL PAPER PASTING AND PAPER HANGING APPARATUS

Norman Higginson, 44 Wighsaw Lane, Culcheth, England  
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This invention relates to improvements in wall paper pasting and paper hanging apparatus.

According to the invention a wall paper pasting and paper hanging apparatus comprises a frame provided with a container for the paste, a cylinder rotatable in the container and dipping into the paste therein, tension rollers through which the paper passes and a roller over which the paper is drawn after passing, characterised by the thickness of the layer of paste applied to the paper being controlled by an adjustable doctor or scraper formed with a plurality of ribs of varying height and capable of rotation to bring any one rib into position to control the thickness of the layer of paste applied to the paper.

The invention will be described with reference to the accompanying drawings:

FIG. 1 is a perspective view of the apparatus;

FIG. 2 is a transverse section through the apparatus on line 2—2, FIG. 1.

The apparatus is constructed with a frame A supporting a container or tray A<sup>1</sup> for paste and a cylinder or paste applying roller B mounted transversely of the container or tray A<sup>1</sup> and dipping into the container or tray to pick up paste and apply it to the paper 1.

A roller B<sup>1</sup> is mounted in the casing A at the feed end over which the paper 1 passes, a second roller B<sup>2</sup> being carried in slots a in the casing to rest on the paper passing over the first roller B<sup>1</sup> and apply pressure thereto, the pair of rollers B<sup>1</sup> and B<sup>2</sup> acting as tension rollers on the paper 1 and as means for guiding the paper onto a portion of the paste applying roller B which at any instant is spaced from the portion thereof dipping into the paste container A<sup>1</sup>. When threading the paper into the apparatus the second roller is raised in the slots a which form means for guiding the roller B<sup>2</sup> toward and away from the roller B<sup>1</sup> which may be formed with recesses a<sup>1</sup> to retain the roller in the raised position.

A roller B<sup>3</sup> covered with a sleeve of rubber or a plastic material to provide a grip on the unpasted side of the paper is provided at the delivery end over which the paper is drawn with its unpasted front face in contact therewith.

The spindle b of the roller B<sup>3</sup> carries a pinion b<sup>1</sup> engaging a pinion b<sup>2</sup> mounted on the spindle of the cylinder B. The paper drawn over the roller B<sup>3</sup> drives the cylinder B.

An adjustable roller B<sup>4</sup> mounted on arms b<sup>3</sup> pivoted on the frame above the center of the cylinder B maintains the paper in contact with the roller B<sup>3</sup> and evens out the paste over the surface of the paper. The second pair of rollers B<sup>3</sup> and B<sup>4</sup> form also part of the guide means serving to keep the paper 1 in contact with the paste applying roller B.

In order to control the amount of paste transferred from the cylinder B to the paper an adjustable doctor C is mounted parallel with the cylinder B in the casing. The doctor C is formed with ribs c of varying height, any one of which may be brought into the position c<sup>1</sup> to regulate the depth of paste on the roller. The doctor spindle is rotated by a crank c<sup>2</sup> provided with a screw or spring plunger c<sup>3</sup> to engage on one or other of a plurality of holes c<sup>4</sup> in the frame according to the depth of paste desired on the cylinder. Crank c<sup>2</sup> together with plunger c<sup>3</sup> and the plurality of holes c<sup>4</sup> in the frame constitute indexing means for turning the doctor C and for fixing

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the same in any one of a plurality of positions in which one of the ribs c extends toward the surface of the roller B to form between the free end of the selected rib and the outer roller surface a gap of selected width. The distance of the ribs c from the cylinder B may vary from 1/4" upwards and in practice four ribs have been found sufficient for applying paste to the various commercial grades of paper in use.

A further roller B<sup>5</sup> may be provided above the cylinder B over which the paper may be drawn back for folding over when pasted in long lengths such as for ceilings.

The paper may be drawn from a roller mounted on a rod D provided with adjustable spacers d or the paper may be pre-cut and lie over the rod D.

The paper 1 enters the feed rollers B<sup>1</sup>, B<sup>2</sup> over one side of the casing which is radiused to prevent damage thereto and may pass under a rod d<sup>1</sup> mounted in arms a<sup>2</sup> on the frame. The paper 1 is passed over the cylinder B and under the covered roller B<sup>3</sup> which is rotated thereby and drives the cylinder B, the amount of paste transferred to the paper being regulated by the doctor C.

In applying wall paper to a wall the apparatus is placed on the floor and sufficient pasted paper withdrawn therefrom to extend from the ceiling to the floor. The paper is applied to the wall and then cut off to length and a further strip applied.

When papering a ceiling the paper may be drawn over the rollers B<sup>5</sup> with the unpasted side in contact therewith, the paper being then folded with the pasted side in contact before applying the paper to the ceiling or the apparatus may be raised to apply the paper to the ceiling.

I claim:

1. In a wall paper pasting apparatus, in combination, support means; a paste container mounted on said support means; a paste applying roller mounted on said support means above said paste container so that a portion of said roller dips into said paste container, said paste applying roller being turnable about its axis; means for guiding a wall paper or the like into contact with a portion of the roller spaced from said aforementioned portion; elongated doctor means for controlling the thickness of the layer of paste applied to the paper, said elongated doctor means having a longitudinal axis extending substantially parallel to the axis of said paste applying roller and having a plurality of ribs of different height extending radially away from the axis thereof over the whole length of said doctor means, said doctor means being mounted on said support means turnable about its axis between a plurality of positions in each of which a selected one of said ribs extends towards the outer surface of the paste applying roller to form between the free end of said rib and said surface a gap of selected widths so as to control the thickness of the paste remaining on the paste applying roller; and indexing means operatively connected to said doctor means for turning the latter about its axis between said plurality of positions and for fixing said doctor means in any of said positions thereof.

2. In a wall paper pasting apparatus, in combination, support means; a paste container mounted on said support means; a paste applying roller mounted on said support means above said paste container so that a portion of said roller dips into said paste container, said paste applying roller being turnable about its axis; means for guiding a wall paper or the like into contact with a portion of the roller spaced from said aforementioned portion; elongated doctor means for controlling the thickness of the layer of paste applied to the paper, said elongated doctor means having a longitudinal axis extending substantially parallel to the axis of said paste applying roller and having a plurality of ribs of different height extending radially away from the axis thereof over the whole length of said doctor means, said doctor means

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being mounted on said support means turnable about its axis between a plurality of positions in each of which a selected one of said ribs extends towards the outer surface of the paste applying roller to form between the free end of said rib and said surface a gap of selected widths so as to control the thickness of the paste remaining on the paste applying roller; and indexing means operatively connected to said doctor means for turning the latter about its axis between said plurality of positions and for fixing said doctor means in any of said positions thereof, said indexing means including a crank fixed to said doctor means for turning the latter about its axis, and a spring pressed plunger mounted on said crank and extending parallel to the axis of the doctor means and cooperating with a plurality of bores formed in the support means angularly displaced about the axis of said doctor means for fixing said doctor means in any of said positions thereof.

3. An arrangement as defined in claim 1 in which said means for guiding the wall paper includes a pair of rollers located in feeding direction of the wall paper ahead of the portion of said paste applying roller which is at any instant contacted by the wall paper, said pair of rollers being respectively adapted to engage the wall paper at opposite sides thereof, and means for guiding one of said rollers toward and away from the other roller and

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including means for holding said one roller in a position spaced from the other roller for facilitating threading of a wall paper between said pair of rollers.

4. An arrangement as defined in claim 3 in which said means for guiding the wall paper includes a second pair of rollers following in feeding direction said paste applying roller for guiding the wall paper therebetween, one of said rollers of said second pair of rollers being adapted to engage the wall paper of the side thereof to which paste has been applied by said paste applying rollers to evenly distribute the paste on the wall paper, and means for mounting said one roller of said second pair of rollers freely turnable about its axis at adjustable distances spaced from the axis of the other roller of the second pair of rollers.

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