

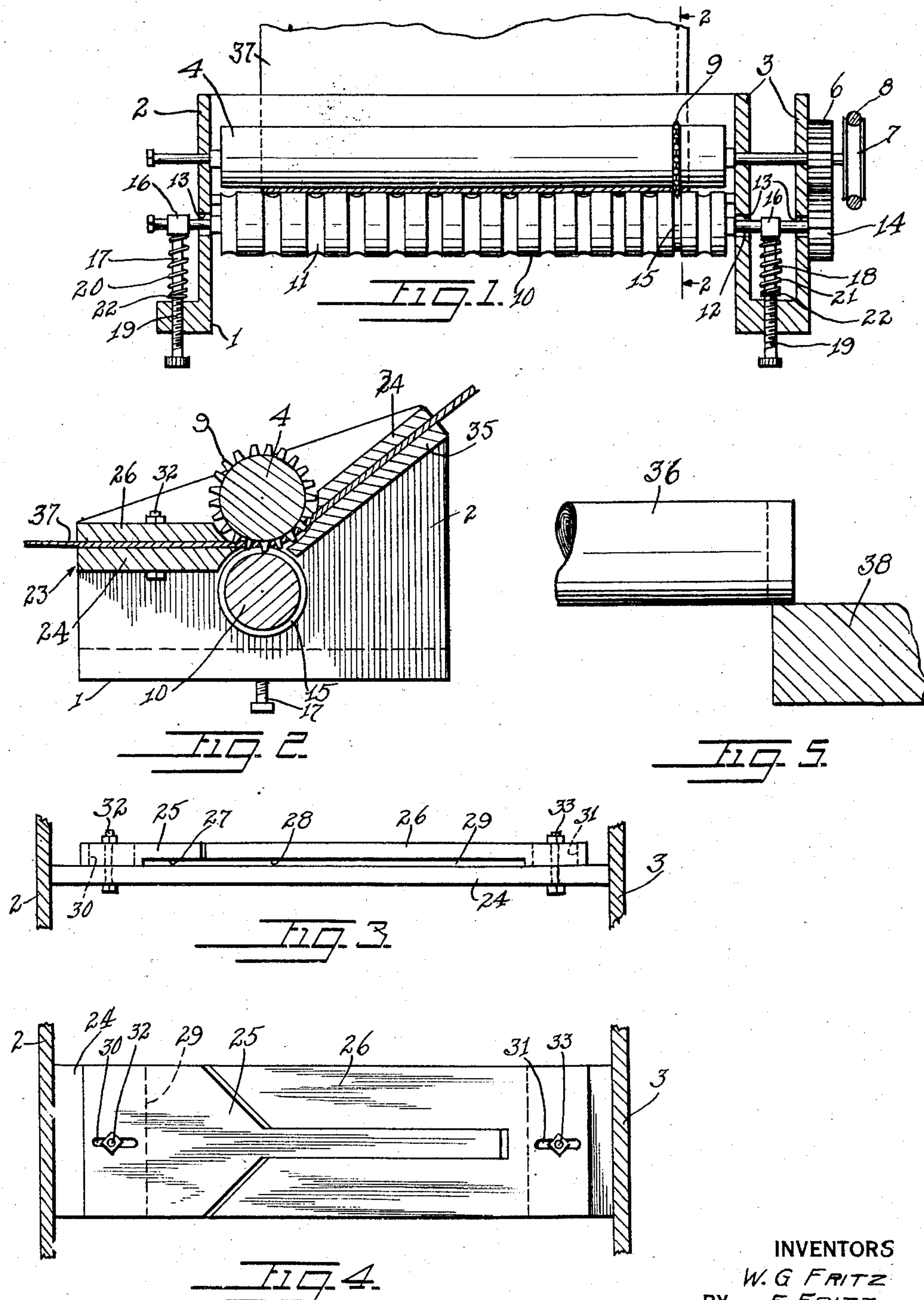
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PAPER TRIMMING DEVICE

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PAPER-TRIMMING DEVICE

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Our invention relates to improvements in paper trimming devices, and it consists in the combinations, constructions, and arrangements herein described and claimed.

5 An object of our invention is to provide a paper trimming device which is especially arranged for wall paper or the like, and which has novel means for cutting the paper at certain intervals.

10 A further object of our invention is to provide a device of the type described by means of which the paper may be cut along the selvage before the paper is formed into rolls.

15 A further object of our invention is to provide a device of the type described which cuts the paper so that the selvage edge of each roll of the paper may be removed therefrom with slight effort.

20 A further object of our invention is to provide a device of the type described which trims the selvage edge of the paper yet retains the selvage edge, thus protecting the roll of paper against damage.

25 Other objects and advantages will appear in the following specification, and the novel features of the invention will be particularly pointed out in the appended claim.

30 Our invention is illustrated in the accompanying drawings, forming part of this application, in which

Figure 1 is a longitudinal sectional view of our device, portions thereof being shown in elevation,

35 Figure 2 is a section along the line 2—2 of Figure 1,

Figure 3 is a section along the line 3—3 of Figure 2,

Figure 4 is a top plan view of a portion of the device, and

40 Figure 5 illustrates a roll of paper being trimmed.

In carrying out our invention, we provide a frame 1 having side walls 2 and 3. A cutting roller 4 is rigidly mounted upon a shaft 5 which is journaled in the sides 2 and 3. A drive gear 6 is rigidly mounted upon the shaft 5. A pulley 7 is also rigidly mounted upon the shaft 5 and is arranged to receive a belt 8 which is operatively connected to any 50 suitable power means, not shown. A toothed

cutter 9 is disposed concentric with the roller 4.

A friction roller 10 having grooves 11 is rigidly mounted upon a shaft 12 which is movably disposed in elongated slots 13 in the side walls 2 and 3. A driven gear 14 is rigidly mounted upon the shaft 12 and is in mesh with the drive gear 6. An annular recess 15 is disposed in the roller 10 in registration with the toothed cutter 9. 55

60 An adjustable means is provided for varying the distance between the rollers 4 and 10. This means comprises blocks 16 rotatably mounted upon the shaft 12 and arranged to receive the ends of adjusting screws 17 and 18. The adjusting screws are movably disposed in the frame 1 by threads 19. Compression springs 20 and 21 are disposed concentric with the adjusting screws 17 and 18, respectively, and are arranged 70 to engage with the blocks 16 and retaining rings 22.

A paper feeding unit 23 consists of a base 24 having a male guide 25 and a female guide 26 movably disposed thereon. The 75 guides 25 and 26 are provided with cut-away portions 27 and 28, thus forming a recess 29 between the guides and the base portion 24. The guides 25 and 26 are provided with elongated slots 30 and 31, respectively, for receiving bolts 32 and 33, respectively. 80

Spaced-apart guide strips 34 and 35 extend between the side walls 2 and 3 for guiding the paper as it passes from between 85 the rollers 4 and 10.

In Figure 5, we have shown a roll of paper 36 after it has passed from between the cutters.

From the foregoing description of the 90 various parts of the device, the operation thereof may be readily understood. Let us assume that power is applied to the pulley 7 through the belt 8. The roller 4 will be rotated in one direction and the roller 10 95 will be rotated in the opposite direction through the gears 6 and 14. The guide plates 25 and 26 may be adjusted so that by passing a strip of paper, indicated at 37, through the recess 29, the paper will be 100

cut at the desired location. There are always selvage edges upon wall paper and one of these edges must be cut from the paper before the paper is hung upon the wall. One of the purposes of retaining the
5 selvage edges until time for the paper to be used is to protect the paper against damage.

Let us assume that the guide plates 25 and
10 26 are set at the desired positions. The operator may then start the paper through the recess 29 until it is gripped between the rollers 4 and 10. The rollers will then continue the movement of the paper and during this
15 movement, the prongs of the cutter 9 will pass through the paper at spaced-apart points. As the paper passes from between the rollers, it passes between the guide strips 34 and 35 and may then be formed into a
20 roll, as shown at 36.

The points of serration cut the roll approximately half in two at the selvage end thereof. The paper is rolled relatively tight and the roll, such as that shown at 36, is
25 relatively solid. The person who wishes to hang the paper may separate the selvage edge from the remainder of the roll by striking the roll, as shown in Figure 5, upon any solid support, as indicated at 38. By
30 striking the roll upon one side and then striking it upon the other, as shown in Figure 5, the selvage end will be torn loose from the remainder of the roll.

This device not only provides a means
35 whereby the selvage end may be readily removed, but when the selvage end is removed, a relatively rough edge is formed upon the paper and through practical experience, it has been found that this rough edge blends
40 into the adjoining strip of paper making it very difficult to see the line where the two strips of paper join.

We claim:

A paper trimming device comprising a
45 frame, a cylindrical member disposed on a shaft mounted in the frame, teeth circumferentially disposed on the cylindrical member adjacent one end thereof, a roller having a circumferential groove for receiving said
50 teeth and being disposed on a shaft adjacent the cylindrical member, bearing blocks for supporting the roller shaft, gears disposed on the cylindrical member shaft and the roller shaft for conversely rotating
55 the cylindrical member and the roller, and adjusting screws disposed in the frame and associated with the roller shaft bearing blocks for varying the position of the roller with respect to the cylindrical member.

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