W. H. KELLY.

ROTARY BLOTTER.

No. 183,501. Patented Oct. 24, 1876.

Fig 1.

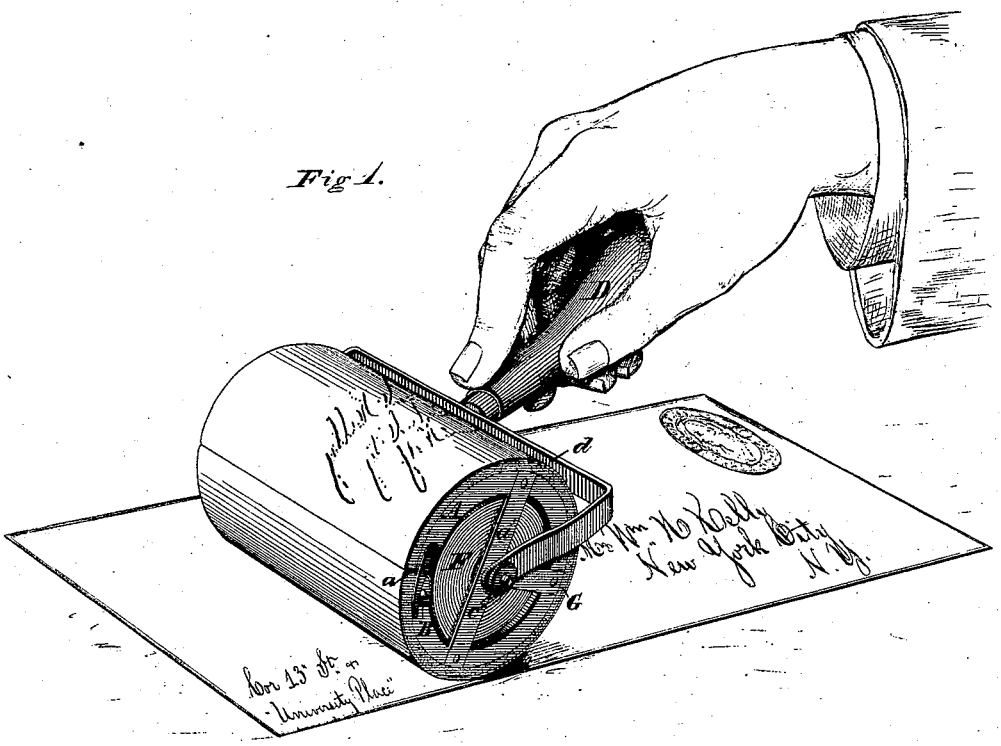


Fig 2.

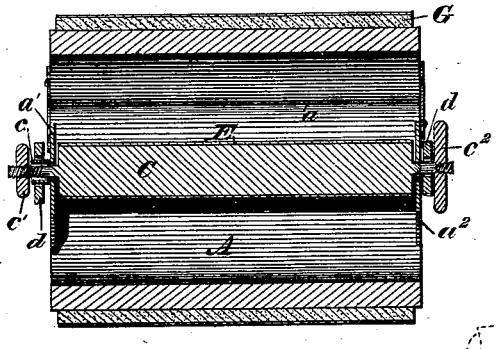
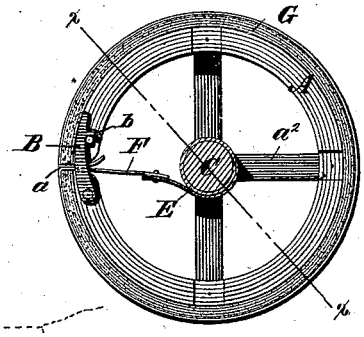


Fig 3.



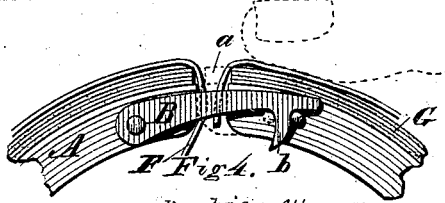


Fig 4.

WITNESSES

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IMPROVEMENT IN ROTARY BLOTTERS.

Specification forming part of Letters Patent No. **183,501**, dated October 24, 1876; application filed March 16, 1876.

To all whom it may concern:

Be it known that I, WILLIAM H. KELLY, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Rotary Blotters; 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 which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to rotary blotters, and consists in a cylindrical-shaped piece of wood or other resilient material, having a slit or mouth cut through on one side and running the entire length of the cylinder, parallel to the axis thereof, which, when braced open by a latch of peculiar construction on one or both ends of the cylinder, allows the blotting-paper to be fed from the web wound upon a drum in the cylinder to the outer surface of the cylinder. These latches also clamp the mouth when closed, thus securing the paper in place, when set upon the outer surface of the cylinder, substantially in the manner hereinafter more fully set forth.

And my invention further consists in clamping mechanism in connection with the drum in the cylinder, whereby the web is securely held in place and prevented from unwinding after the paper has been set upon the outer surface of the cylinder, substantially in the manner hereinafter more fully set forth; and my invention further consists in a novel method of fastening the inner end of the paper web to the drum in the cylinder, substantially in the manner hereinafter more fully set forth; and my invention further consists in the above-mentioned method of fastening the inner end of the web to the drum, in combination with a windlass, whereby the paper is wound upon the drum without detaching any part of the roller mechanism, after having been indirectly attached to the drum outside of the mouth of the cylinder, substantially in the manner hereinafter more fully set forth.

In the drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a longitudinal section of the same, cut through on the line *x* of Fig. 3. Fig. 3 is an end view of the cylinder, showing one of the end frames removed and the drum in transverse section, and Fig. 4 is an enlarged side view of the mouth of the cylinder and the latch.

The cylinder-roller A is constructed of wood or other resilient material. A slit or mouth, *a*, is cut through on one side, running the entire length of the cylinder, and parallel to its axis. A latch, B, is provided on one or both ends of the cylinder. While the inner surface of the drop or hook *p* on this latch serves as a clamp to keep the mouth securely closed, as shown in Fig. 3 and in dotted lines in Fig. 4, the outer edge forms a cam to facilitate the opening of the mouth, and afterward a brace to keep the same open, as shown in Fig. 4. A drum, C, forms the axis of the cylinder, its journals resting in side frames a^1 a^2. The handle D has rigidly attached to it a bracket, *d*, one end of which bears directly upon one of the drum-journals, while the other bears upon a small sleeve, *c*, placed between the side frame a^1 and a set-screw or clamping-nut, c^1, as shown in Fig. 2. This sleeve and nut are for the purpose of securing the drum in position relative to the cylinder, without affecting the free bearing on that end of the bracket. This result is produced by screwing up the nut and thus forcing the sleeve, frame a^1, and the adjacent end of the drum together, thereby creating sufficient friction to lock the drum and prevent the unwinding of the web of paper from the drum. The perforations in each end of the bracket, through which the drum-journals pass, are sufficiently large to allow of free movement of cylinder at all times. A cloth strip, E, is secured to the drum C in any well-known way. This strip is sufficiently long to extend from the drum out through the mouth to the outside of the cylinder. To this strip is connected the inner end of the web of blotting-paper F, (Figs. 1 and 3,) either by pinning, pasting, or other like method, the former being the most convenient. Upon the drum-journal, opposite the one bearing the sleeve, is rigidly attached a windlass, c^2, for the purpose of winding up the paper on the drum or feeding out the same to the outside of the cylinder, the clamping-

nut c^1 being released. The outside surface of the cylinder has a covering, G, of felt or other soft material, for purposes that are obvious.

Assuming the drum to require a new supply of blotting-paper, the operation is as follows: The latches are raised from their clamping position, as seen in Figs. 1 and 3, and used as braces to keep the mouth open, as seen in Fig. 4. The clamping-nut being released, the free end of the cloth strip is run out through the mouth for the purpose of connecting to it one end of a long strip of blotting-paper, said strip being of the width of the drum. The drum is then operated so as to wind up the strip of blotting-paper into a web by means of the windlass. Sufficient paper is left outside of the mouth to encircle the cylinder and admit of the end being inserted into the mouth, where it is held by the thumb of the operator until the drum has been revolved sufficient to take up the loose portion of the strip of paper, when the braces are disengaged and converted into clamps, thereby firmly closing the mouth. The clamping-nut is then screwed up, when the drum becomes fixed in the cylinder, and the blotter is ready for use. When it becomes necessary to change the paper on the outside of the cylinder the mouth is opened, the clamping-nut released, the paper fed out, the used portion of the paper cut or torn off, and so on, as hereinbefore described.

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

1. The resilient cylindrical roller A, in combination with latches B B, provided with a hook or clamp surface upon one edge of the drop, so as to clamp the roller when closed, and a cam surface and notch upon the other edge, so as to brace the roller when open, substantially as described.

2. In a cylindrical blotter the combination of the roller A, the side frames a^1 a^2, the drum C, sleeve c, and clamping-nut c^1, substantially as and for the purposes set forth.

3. In a cylindrical blotter the combination of the drum C and cloth strip E, substantially in the manner and for the purposes specified.

4. In a cylindrical blotter, the drum C, windlass c^2, and strip E, sufficiently long to pass outside of the cylinder, whereby the blotting-paper may be secured to the drum outside of the cylinder, and wound upon the drum without detaching any of the parts of the roller, substantially in the manner described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

WILLIAM H. KELLY.

Witnesses:

P. J. BONESTEEL,

J. H. PITMAN.