

C. O. L. CARDELL.  
 PERFORATING AND TRIMMING MECHANISM FOR FOLDING MACHINES.  
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1,051,803.

Patented Jan. 28, 1913.

Fig. 1.

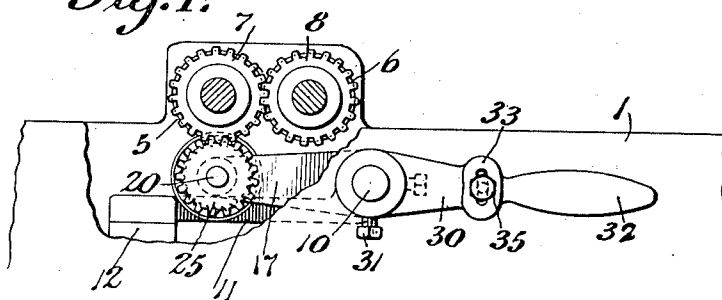


Fig. 2

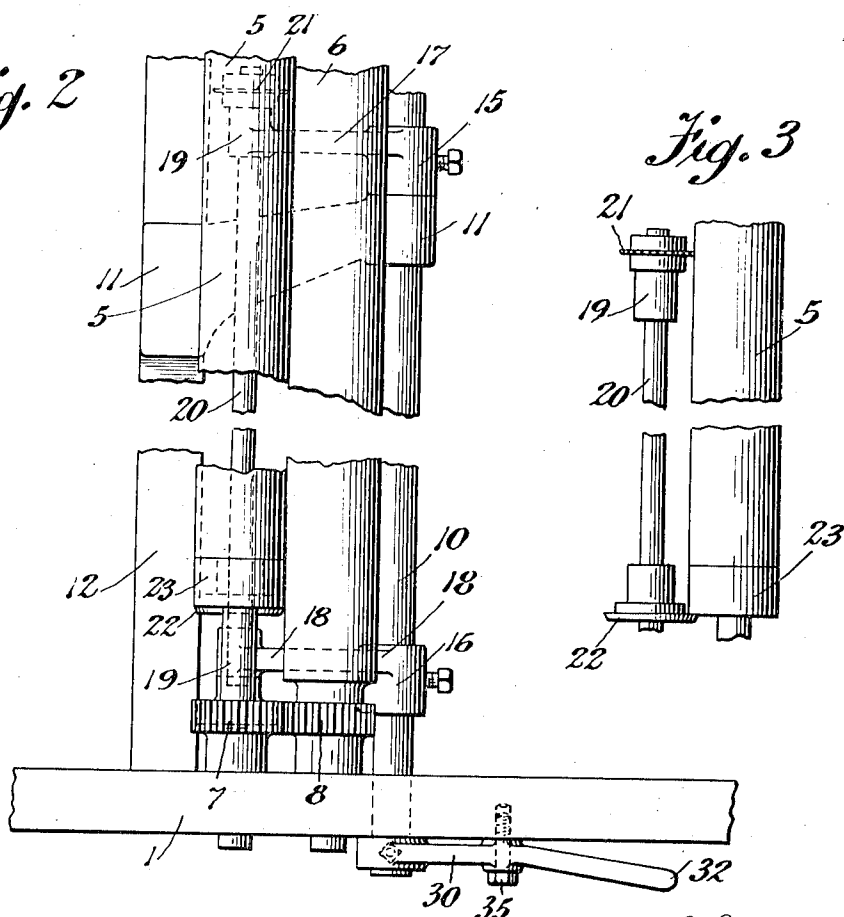
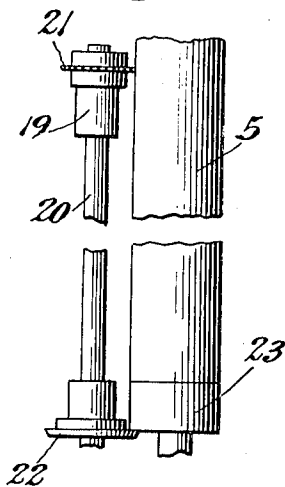


Fig. 3



Witnesses:  
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 Inventor,  
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# UNITED STATES PATENT OFFICE.

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PERFORATING AND TRIMMING MECHANISM FOR FOLDING-MACHINES.

1,051,803.

Specification of Letters Patent.

Patented Jan. 28, 1913.

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*To all whom it may concern:*

Be it known that I, CHARLES O. L. CARDELL, a citizen of the United States, and resident of Pearl River, county of Rockland, State of New York, have invented new and useful Improvements in Perforating and Trimming Mechanism for Folding-Machines, of which the following is a specification.

The main purpose of the present invention is to produce a perforating and trimming mechanism for folding machines which will be more convenient to adjust and move into and out of operative position. These mechanisms, as usually constructed, are placed in inconvenient positions upon the machine so that the operator is compelled to reach into inconvenient places for setting them into or out of operative positions.

In order that the invention may be fully understood I will first describe the same with reference to the accompanying drawing and afterward point out the novelty in the annexed claims.

In said drawing Figure 1 is a detail sectional side elevation of my improved perforating and trimming device applied to a folding couple. Fig. 2 is a detail plan view of the same. Fig. 3 is a detail front elevation of the main parts of the same.

The drawing shows only sufficient of a paper folding machine to illustrate the invention.

1 is part of the frame of the folder in which a pair of folding rollers 5 and 6 are journaled at their ends. These rollers are geared together as shown at 7 and 8 in the usual manner. The folding blade which co-operates with the rollers is omitted since it forms no part of the present invention.

10 is a rock shaft journaled at its opposite ends in the side frames of the machine and centrally braced by bearing bracket 11, mounted upon a cross bar 12 of the machine frame. This rock shaft 10 has adjustably secured to it at 15 and 16 the rock arms 17 and 18, formed at their free ends with bearing sleeves 19 in which is journaled a rotary shaft 20. The shaft 20 has a serrated perforating cutter 21, secured to it at its inner end in the usual manner and a trimming cutter 22, secured to it adjacent to its outer end also in the usual manner. The perforating cutter 21 operates against the periphery of one of the folding rollers 5,

while the trimming cutter 22 operates against the usual trimming collar 23 adjustably secured upon the shaft of the folding roller 5.

The outer end of the shaft 20 carries a pinion 25 which is adapted to mesh with the gear or pinion 7. The outer end of the rock shaft 10 carries a controlling rock arm 30 which is adjustably secured to it by means of a set screw 31. This controlling rock arm 30 is formed with a handle 32 and with a transverse curved slot 33. A set bolt 35 passes through the slot 33 and is threaded into the side frame of the machine.

It will be observed that the controlling hand lever 30 is presented at the outside of the machine in convenient position for operation. By loosening the bolt 35, the operator can shift the lever 30 for moving the perforating and trimming cutters 21 and 22 into and out of operative position. The arrangement of this lever affords convenient means for accurately setting the cutters with reference to the folding rollers, and avoids the necessity of getting under the machine for effecting the necessary adjustments.

What I claim is:

1. In a folding machine, the combination of suitable folding rollers, with a rotary cutter coöperating with one of said rollers, a rocking frame supporting said rotary cutter, an operating handle mounted upon said rocking frame and presented at the outside of the folding machine, and means for securing said handle in the desired adjusted position.

2. In a folding machine, the combination of a suitable frame, folding rollers mounted in said frame, a rock shaft journaled in said frame adjacent to said rollers, rock arms mounted upon said rock shaft, a rotary cutter shaft journaled in said rock arms, perforating and trimming cutters mounted upon said rotary shaft, in operative relation to one of said rollers, and an operating lever secured to the outer end of said rock shaft on the outside of the machine frame.

3. In a folding machine, the combination of the machine frame and the folding rollers journaled therein, with a rock shaft suitably journaled in said frame, rock arms mounted upon said rock shaft, a rotary shaft journaled in said rock arms, a rotary cutter mounted upon said rotary shaft, means for

driving said rotary shaft, a controlling hand lever secured to the outer end of said rock shaft upon the outside of the machine frame, and means for securing said controlling hand lever in the desired adjusted position.

4. In a folding machine, the combination of a suitable frame and geared folding rollers journaled in said frame, with a rock shaft journaled in said frame and carrying rock arms, a rotary shaft journaled in said rock arms, a perforating cutter and a trimming cutter, both mounted upon said rotary

shaft, a pinion upon said rotary shaft adapted to mesh with a gear upon one of said folding rollers, a controlling hand lever secured to the end of said rock shaft on the outside of said machine frame, and a set screw or bolt threaded in said frame and engaging said controlling hand lever for securing it in the desired adjusted position.

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Witnesses:

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