R. B. CAMPBELL.

REWINDING WALL PAPER MACHINE.

APPLICATION FILED JULY 5, 1913.

**1,141,441.**

**Patented June 1, 1915.**

2 SHEETS—SHEET 1.

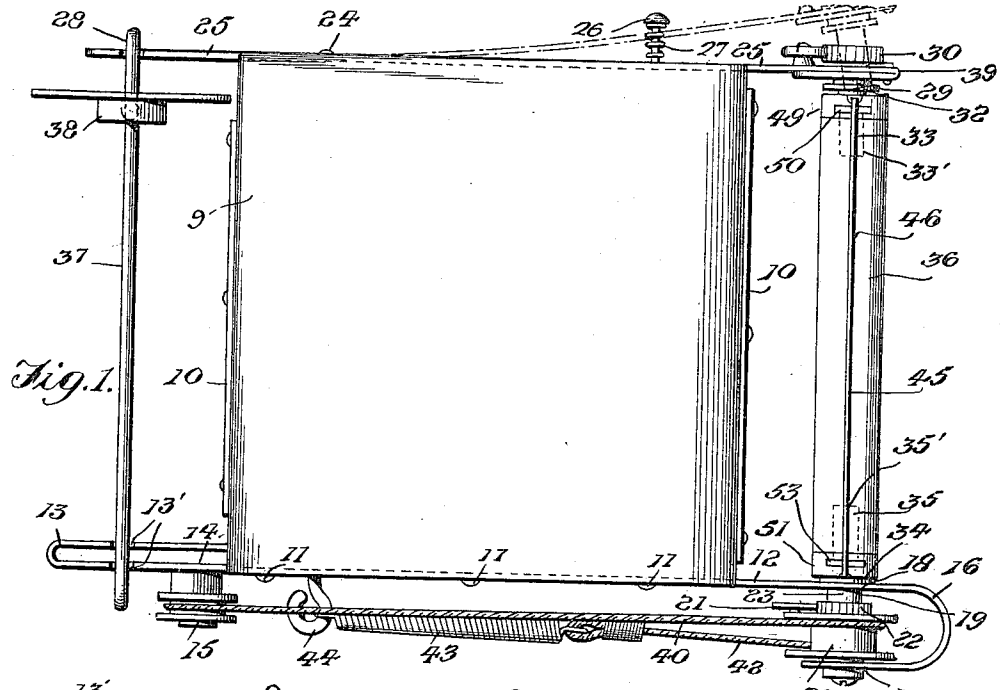


Fig. 1.

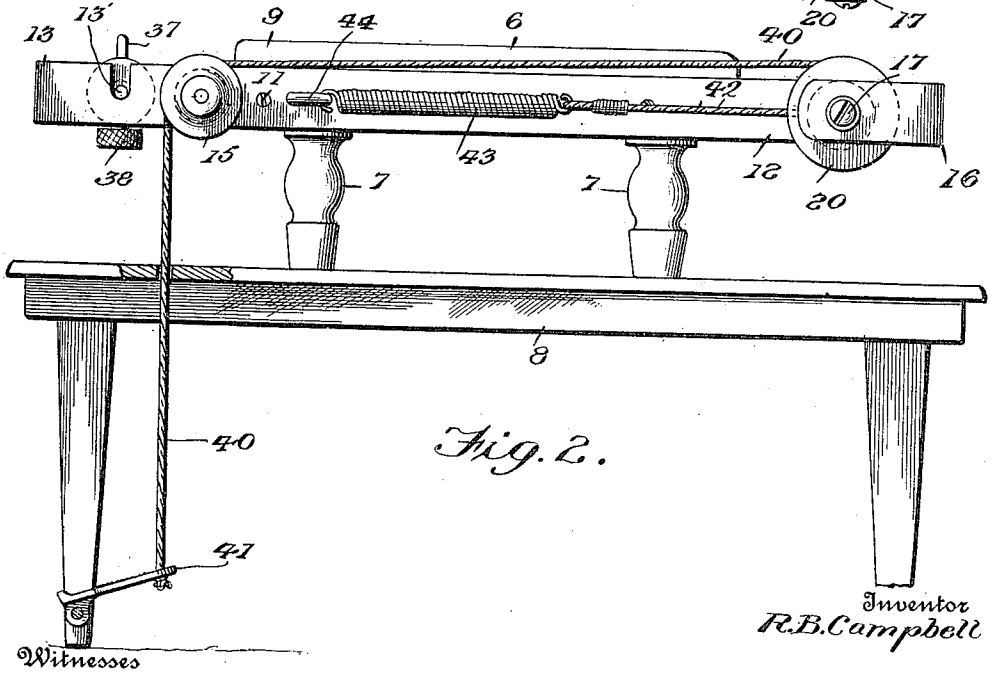


Fig. 2.

Witnesses

Dudley Brown.

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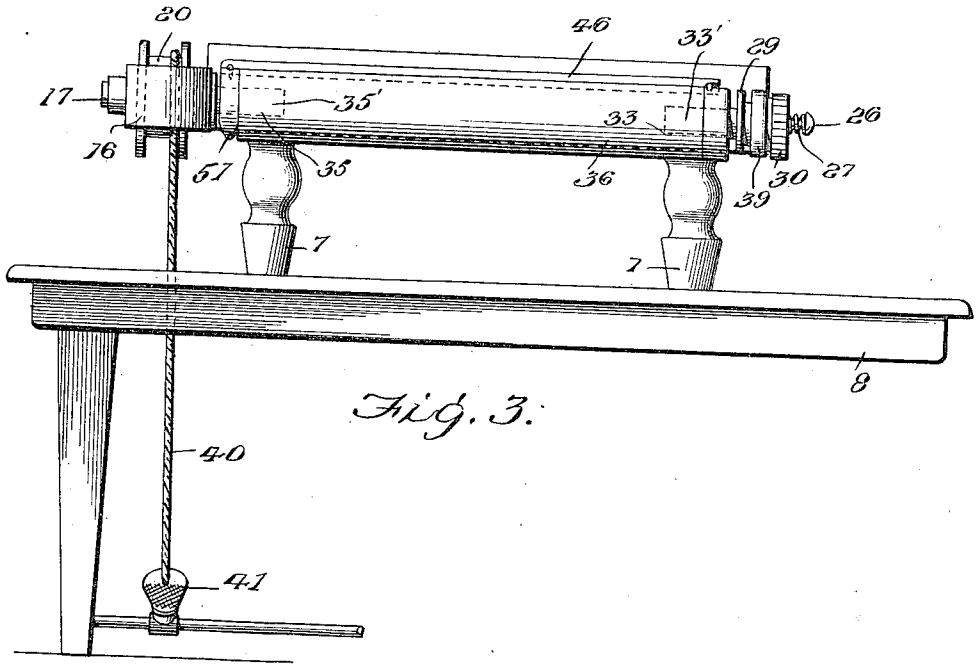



Fig. 3.

Fig. 5.

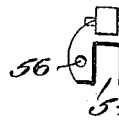



Fig. 4.

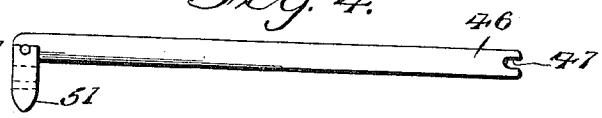
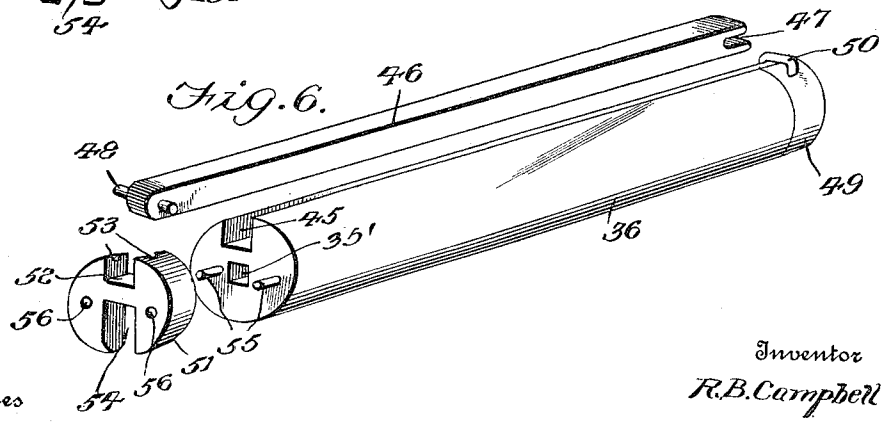



Fig. 6.




Witnesses

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# UNITED STATES PATENT OFFICE.

ROYAL B. CAMPBELL, OF THREE RIVERS, MICHIGAN.

## REWINDING WALL-PAPER MACHINE.

1,141,441. Specification of Letters Patent. Patented June 1, 1915.

Application filed July 5, 1913. Serial No. 777,547.

*To all whom it may concern:*

Be it known that I, ROYAL B. CAMPBELL, citizen of the United States, residing at Three Rivers, State of Michigan, have invented certain new and useful Improvements in Rewinding Wall-Paper Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as 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 letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to machines for use in rewinding wall paper or the like and more particularly to that class of machines adapted to rewind wall paper or the like upon a roll after the paper has been perforated or cut out by some of the usual devices.

The primary object of this invention is to provide a machine for rewinding wall paper which shall be convenient and easy of operation.

A further object is to provide a device of this character which shall combine cheapness of manufacture and durability, and which shall be well adapted for the specific uses of such devices.

With these and other objects in view, this invention consists in the peculiar combination and arrangement of the various parts of a machine for rewinding wall paper or the like as hereinafter described and more particularly pointed out in the appended claims.

Referring to the drawings forming a portion of this specification, wherein similar reference numerals indicate similar parts wherever used Figure 1 is a top plan view of the device. Fig. 2 is a side elevation. Fig. 3 is an end view. Fig. 4 is a view of the clamp bar detached. Fig. 5 is a rear view of the clamp bar, detached. Fig. 6 is a perspective view of the roll and the clamp bar separated.

The numeral 6 designates a table supported by means of legs 7, the table being shown as resting upon the top of a table or platform 8. The top of the table 6 is covered with heavy felt 9, held in place by means of strips 10 at the edges of the table 6.

Secured to the front edge of the table 6 by screws 11 is a flat strip 12 preferably made of metal and having one of its ends bent to form a rearwardly extending loop 13 having an open bearing 13′ and a closed bearing 14, the bearing 14 carrying the axle of a sheave wheel 15. The other end of the strip 12 is bent to form a forwardly extending loop 16 having apertures 17—18 formed in its members, said apertures carrying a revoluble shaft 19 which has loosely mounted thereon a drum 20 carrying upon its inner periphery a pivoted pawl 21. Fast upon the shaft 19 adjacent the inner edge of the drum 20 is a ratchet wheel 22 so placed as to engage the pawl 21. Placed between the ratchet 22 and the bearing 17 is a collar 23 adapted to form a bearing surface against the strip 12.

Secured to the rear of the table 6 by means of a screw 24 is a similar strip 25 which is free from the point 24 along the edge of the table, but which is held in place by means of a headed bolt 26 placed in an aperture in the strip 25 and embedded in the side of the table. A coil spring 27 between the strip 25 and the head of the bolt 26 serves to press the strip 25 tightly against the table 6. The end of the strip 25 opposite the loop member 13 is provided with an aperture 28. The other end of the strip 25 has a bearing formed therein for the reception of a shaft 29 which carries a ratchet wheel 30 adapted to engage a pawl 31 fastened to the strip 25. The shaft 29 extends inwardly carrying a collar 32 and being provided at its inner end with a squared portion 33. The shaft 19 also carries a collar 34 and a squared portion 35.

Between the squared ends 33—35, is placed a roll 36 having squared internal bushings 33′, 35′ for the reception of the squared shafts 33—35. Mounted in the bearings 14—28 is a removable shaft 37 carrying an adjustable collar 38.

The roll 36 may be removed by exerting pressure against the strip 25 to push the end 39 away from the table 6 against the action of the spring 27, until the squared end 33 may be easily removed from the bushing 33′.

The drum 20 carries a rope 40 which is wrapped around the drum 20 and then passes along the edge of the table 6 and over the sheave wheel 15 and then downwardly where it is fastened to a foot lever 41.

Fastened to the drum 20 is a second rope

42 fastened to a strong coil spring 43 which is in turn secured to an eye-bolt 44 on the table 6.

In the periphery of the roll 36 is a slot 45 adapted to receive a bar 46 which has a notch 47 at one end thereof and pins 48 at the opposite end. Mounted on the roll 36 at the end adjacent the bushing 33′ is a collar 49 carrying a staple 50 mounted over the end of the slot 45 and adapted to engage the notch 47. At the other end of the roll 36 is a removable collar 51 formed with a slot 52 corresponding to the slot 45 and having notches 53 adapted to receive the pins 48. The collar 51 has a square aperture 54 formed therein which slips over the squared end 35 of the shaft 19. The collar 51 is removably secured to the roll 36 by means of dowel pins 55 driven through the collar and into the roll through apertures 56 provided therein. The bar 46 is thus held tightly within the slot 45.

The operation of the device is as follows. The roll of paper to be cut is placed on the shaft 37 and passed over the table 6 and to the roll 36 where the paper is pressed down into the slot 45 and the clamp bar 46 tightly secured therein as heretofore described. The border of the paper is cut by any of the usual devices upon the table 6. When it is desired to wind the paper upon the roll 36 in order to present an uncut portion of the border the foot lever 41 is depressed which causes the rope 40 to unwind from the drum to rotate the same in a counter-clockwise direction loosely about the shaft 19 carrying the pawl 21 with it. This rotation of the drum 20 causes the rope 42 to wind about the drum 20 against this action of the spring 43. Upon the release of the foot lever 41 the action of the spring 43 will wind the rope 42 from the drum 20, causing it to rotate in a clockwise direction which causes the pawl 21 to engage the ratchet wheel 22 to allow the wheel 22 to be rotated with the drum 20 in its clockwise direction which in turn imparts a like motion to the shaft 19 and the roll 36 carried thereby, then winding up a portion of the paper fastened to the roll 36. The pawl 31 and the ratchet wheel 30 act in conjunction with the pawl 21 and the ratchet wheel 22. When it is desired to remove the roll 36 as it becomes full, the strip 25 is pressed away to allow the shaft 33 to clear the bushing 33′ and the entire roll removed. The dowel pins 55 are then removed and the collar 51 removed from the roll. The bar 45 can now be removed from the slot 46 by pulling the rod 45 away from the staple 50 when the roll of paper may be slid off the roll 36 in the same direction, the roll 36 replaced on the shafts 33, 35 and the operation repeated.

Should it be desired to rotate the roll 36 independent of the mechanism described, the pawls 21 and 31 are so constructed that they may be pressed entirely out of engagement with the ratchet wheels 22 and 30, which are then free to rotate in either direction, allowing the roll 36 to also freely rotate in either direction.

Preferably the ropes 40 and 42 are fastened to the drum 20 in the following manner. The ropes are passed through holes which are drilled in the drum and the ropes are knotted on the inside of the drum to prevent the ropes from passing through.

Considerable variation of the details of construction herein described may be resorted to without departing from the spirit of my invention.

What I claim as new and desire to secure by United States Letters Patent, is:—

1. In a machine for winding paper or the like, the combination of a platform having extensions at one end, bearings formed in the extensions, a shaft supported in the bearings, a bracket at one corner of the platform, said bracket having alined bearings, a shaft mounted in the alined bearings, the inner end of said shaft having a flat side, a pulley on the shaft, means for rotating the pulley, a yielding arm on one side of the platform and extending beyond the end of same and formed with a bearing in alinement with the bearings in the bracket, a shaft mounted in the bearing in the yielding arm, said latter shaft having a flat surface, a roll formed at its ends with openings corresponding to the shape of the inner ends of the two shafts and in which said shafts fit, said roll having a recess extending across its periphery, web securing means fitting in the recess, and a spring engaging the yielding arm to hold the roll and shafts in coöperative relation.

2. In a machine for winding paper or the like, the combination of a platform, a bracket extending from one corner of the platform, a short shaft mounted in the bracket, means for rotating the short shaft, a yielding arm secured to the side of the platform, and extending beyond one end of the latter, a short shaft mounted in the yielding arm in alinement with the short shaft supported in the bracket, the inner end of both of said short shafts having flat surfaces, a roll formed at its ends with recesses corresponding to the shape of the ends of the short shafts, and in which the inner ends of the latter engage, said roll having a recess on its periphery, a collar on the short shaft adjacent the yielding arm and bearing against one end of the roll, a second collar having openings extending through it and a notch to straddle the short shaft supported in the bracket and bearing against one end of the roll, pins extending from the end of the roll and fitting in the openings in the second mentioned collar, and web

securing means mounted on the second mentioned collar and engaging the recess in the roll.

3. In a machine for winding paper, the combination of two alined short shafts having flat surfaces at their inner ends, means for rotating one of the short shafts, a roll having openings in its ends corresponding to and in which the inner ends of the short shafts fit, collars at the ends of the roll and mounted on the short shafts, web securing means secured to one of the collars and means on the opposite collar for locking the web securing means.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROYAL B. CAMPBELL.

Witnesses:
J. B. BURNS,
WILBUR CASTLE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."