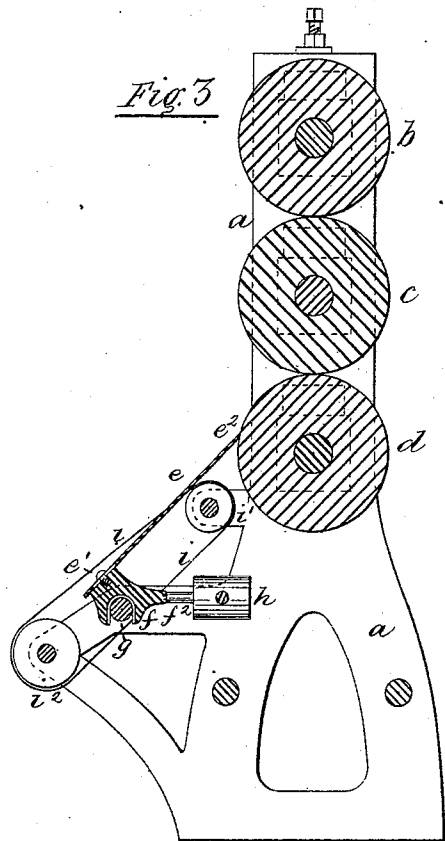
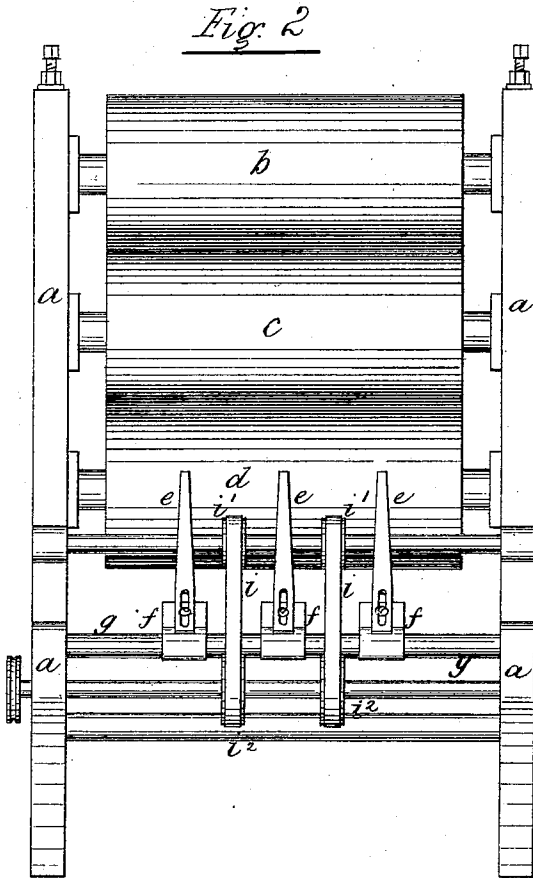
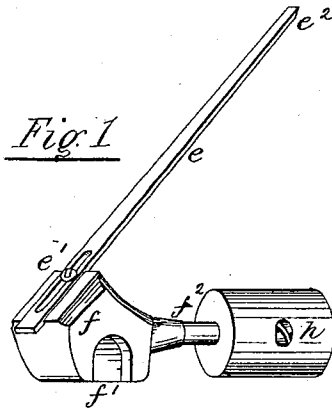


(No Model.)

J. McLAUGHLIN.  
Paper Calendering Machine.  
No. 242,550. Patented June 7, 1881.



Witnesses.  
*C. A. Maffie*  
*A. D. Williams*

*John M. Laughlin.*  
Inventor.  
per *Alfred Theobald.*  
Atty.

# UNITED STATES PATENT OFFICE.

JOHN McLAUGHLIN, OF LEE, MASSACHUSETTS.

## PAPER-CALENDERING MACHINE.

SPECIFICATION forming part of Letters Patent No. 242,550, dated June 7, 1881.

Application filed April 30, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN McLAUGHLIN, of Lee, county of Berkshire, State of Massachusetts, have invented a certain new and useful Improvement in Paper-Calendering Machines, of which the following is a specification.

This improvement in paper-calendering machines relates to the fingers for stripping the sheets of paper off the last roller. Said stripping-fingers as heretofore made are secured to one rod, and their ends caused to press against the roller by means of a weight or spring actuating the rod. The fingers are rigid on the rod as regards lateral movement, and consequently bear always on the same parts of the roller, which necessitates frequent refitting of the same by grinding; otherwise these grooves mark the paper being calendered. Now, I overcome this objectionable feature in calendering-machines by making the stripping-fingers independent in their action on the last roller by securing them to separate blocks provided with adjustable weights, to cause the fingers to independently bear with the proper force against the roller, and the blocks have open bearings, by which they are placed on a fixed rod, thus enabling each finger to be moved laterally, so that its end may bear on different parts of the roller, thus causing an even wear to the surface of the roller. The fingers may be moved laterally, as desired, by the attendant while the machine is in operation, or taken off and placed and arranged on the fixed bar, to suit the sizes of the sheets of paper being calendered.

To describe my invention more particularly I will refer to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of my independent detachable finger for calendering-machines. Fig. 2 is an elevation of a calendering-machine with the independent detachable fingers in position to strip the paper off the last roller; and Fig. 3 is a transverse sectional elevation of the same.

Only sufficient of a calendering-machine is shown to illustrate the application of my improved stripping-fingers thereto.

*a a* are the side frames, and *b, c,* and *d* the rollers. *d* is the last roller, and it is against this that the stripping-fingers *e e* bear to dis-

charge the paper from it into the receiving-box. Three stripping-fingers only are here shown, it of course being understood that the number of them will depend on the size of the machine and quality and size of the paper being calendered.

Fig. 1 illustrates the essential features of my invention. The finger *e* is secured in an angular position to the block or head *f* by means of the screw *e'*, which passes through a slot in the lower end of the finger to enable the upper end, *e<sup>2</sup>*, which is tapered off to a sharp edge, so as to lie close to the roller *d*, to be set in line with the ends of the other fingers, to strip the paper evenly off the roller *d*. The head or block *f* has an open bearing, *f'*, by which it rests on the fixed rod *g*, secured in brackets from the side frames, *a a*; and projecting from its sides in a horizontal position under the free end of the finger *e* is the rod *f<sup>2</sup>*, which may be cast with the block or head *f*, or be screwed or driven in a hole therein; and on this rod *f<sup>2</sup>* is placed the pressure-weight *h*, secured thereto by a screw. The position in which this weight *h* is set on the rod determines the pressure of the end *e<sup>2</sup>* of the finger against the roller *d*. Each finger, with its carrying block or head *f* and pressure-weight *h*, being independent, and merely resting on the fixed rod *g*, it will be observed may be set to bear on any part of the roller *d* desired, and be shifted about, so as to prevent grooves being worn in the roller, and also be readily removed from and replaced on the rod *g*, according to the number required to properly strip the sheets of paper from the roller *d*.

I have shown tapes *i i* on small pulleys *i' i<sup>2</sup>*, arranged and adapted to convey the paper off the fingers *e e* into a receptacle, which will be placed under the lower pulleys, *i<sup>2</sup>*, but is not shown in the drawings, because the same forms no part of my invention. Other arrangements of guide tapes or rollers may be used with these independent detachable stripping-fingers, or the sheets of paper may pass directly from the fingers into the receptacle; and the blocks or heads *f* and pressure-weights *h*, and the method of securing them and the fingers *e* to the blocks *f* may be modified without departing from the nature of my invention.

Having now described the construction and

operation of my invention, what I claim, and desire to secure by Letters Patent, is—

1. An independent detachable stripping-finger for calendering-machines, provided with a pressure-weight, and adapted to be adjusted on a fixed rod to bear against different parts of the last roller, to strip the sheets of paper therefrom, substantially as hereinbefore set forth.

2. In an independent detachable stripping-finger for calendering-machines, in combina-

tion, the finger *e*, block or head *f*, provided with the open bearing *f'*, and pressure-weight *h*, substantially as and for the purpose hereinbefore set forth.

In testimony whereof I have hereunto set my hand this 26th day of April A. D. 1881.

JOHN McLAUGHLIN.

Witnesses:

J. L. KILBON,  
FRANK SAVAGE.