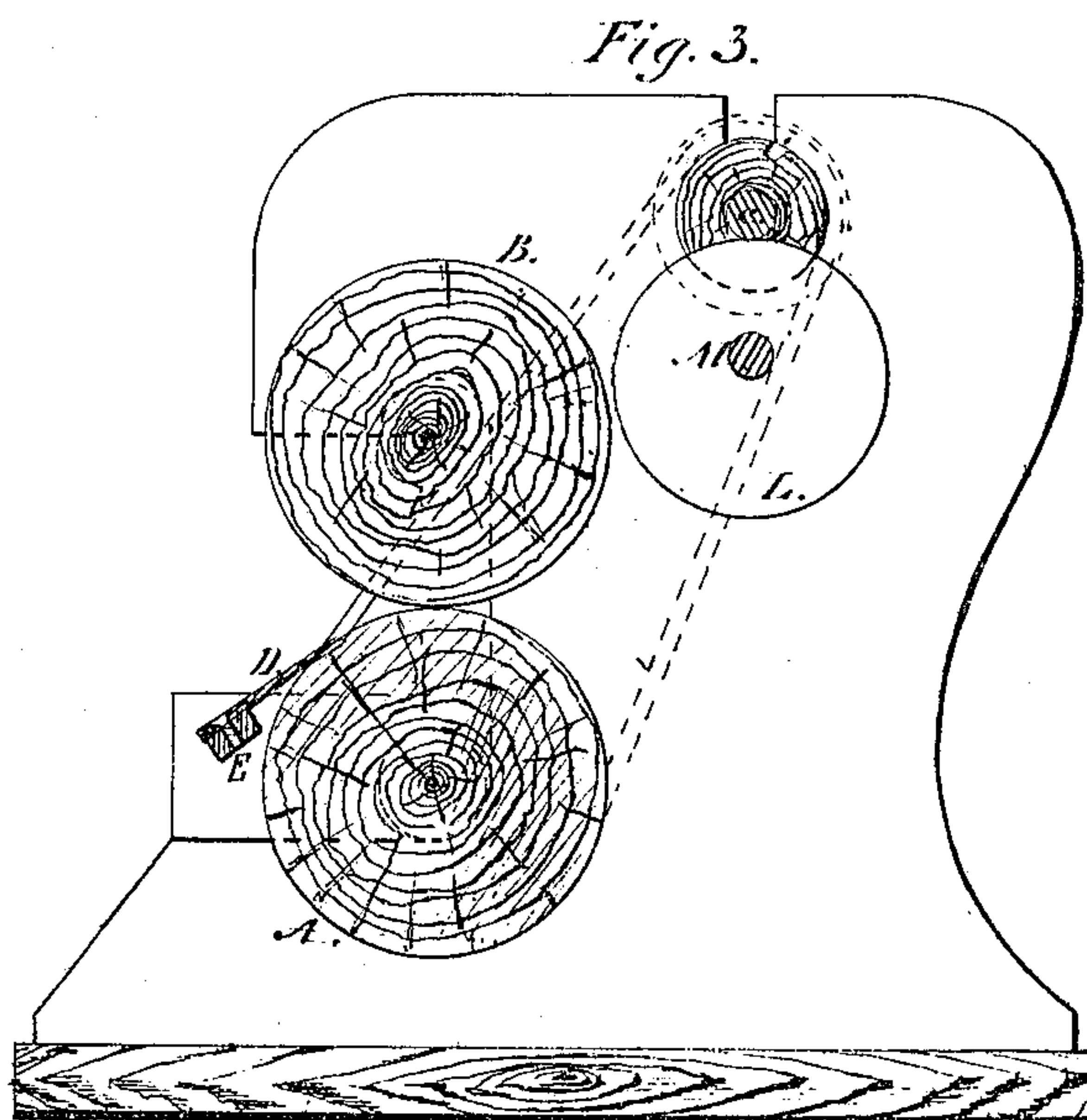
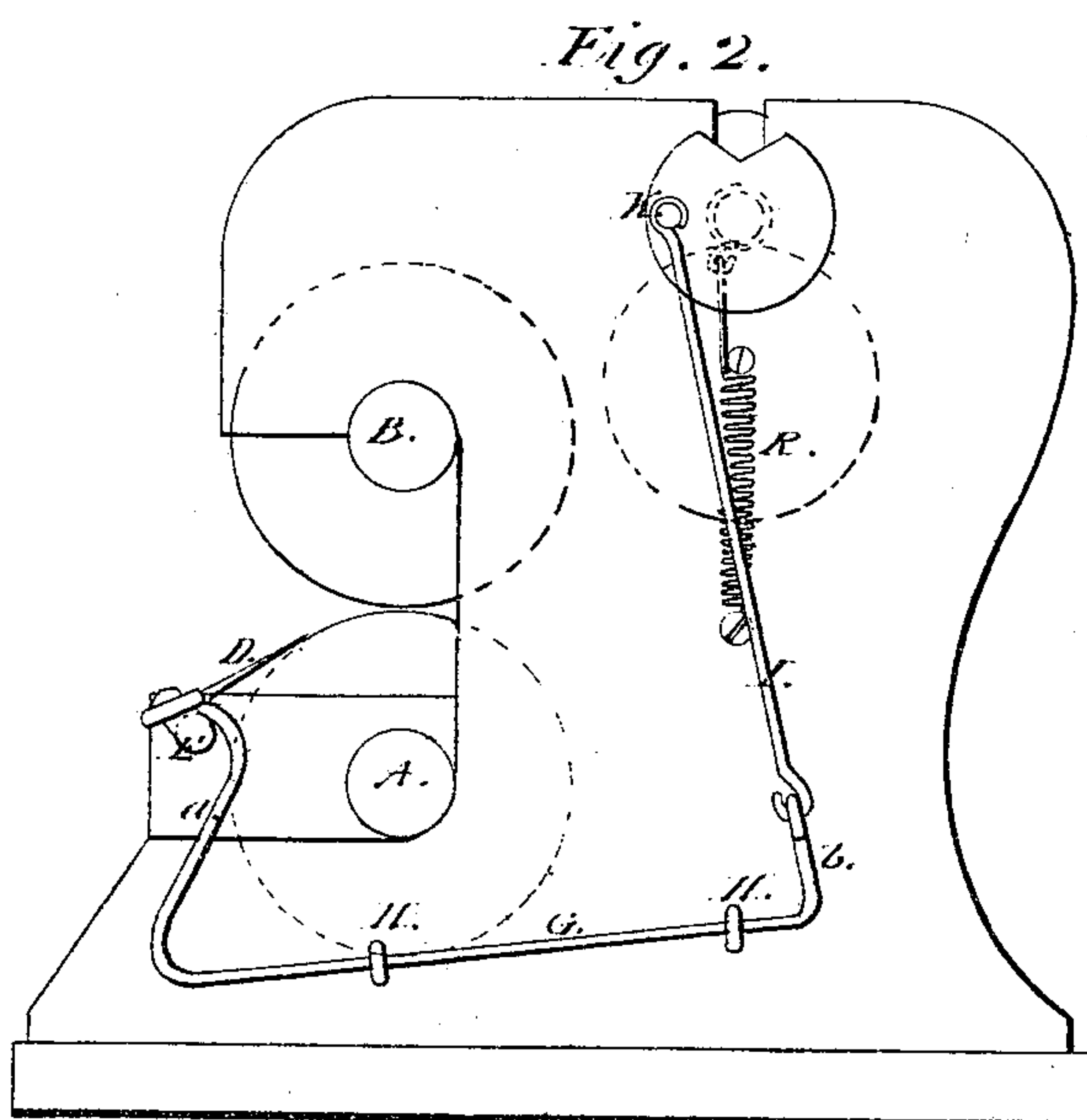
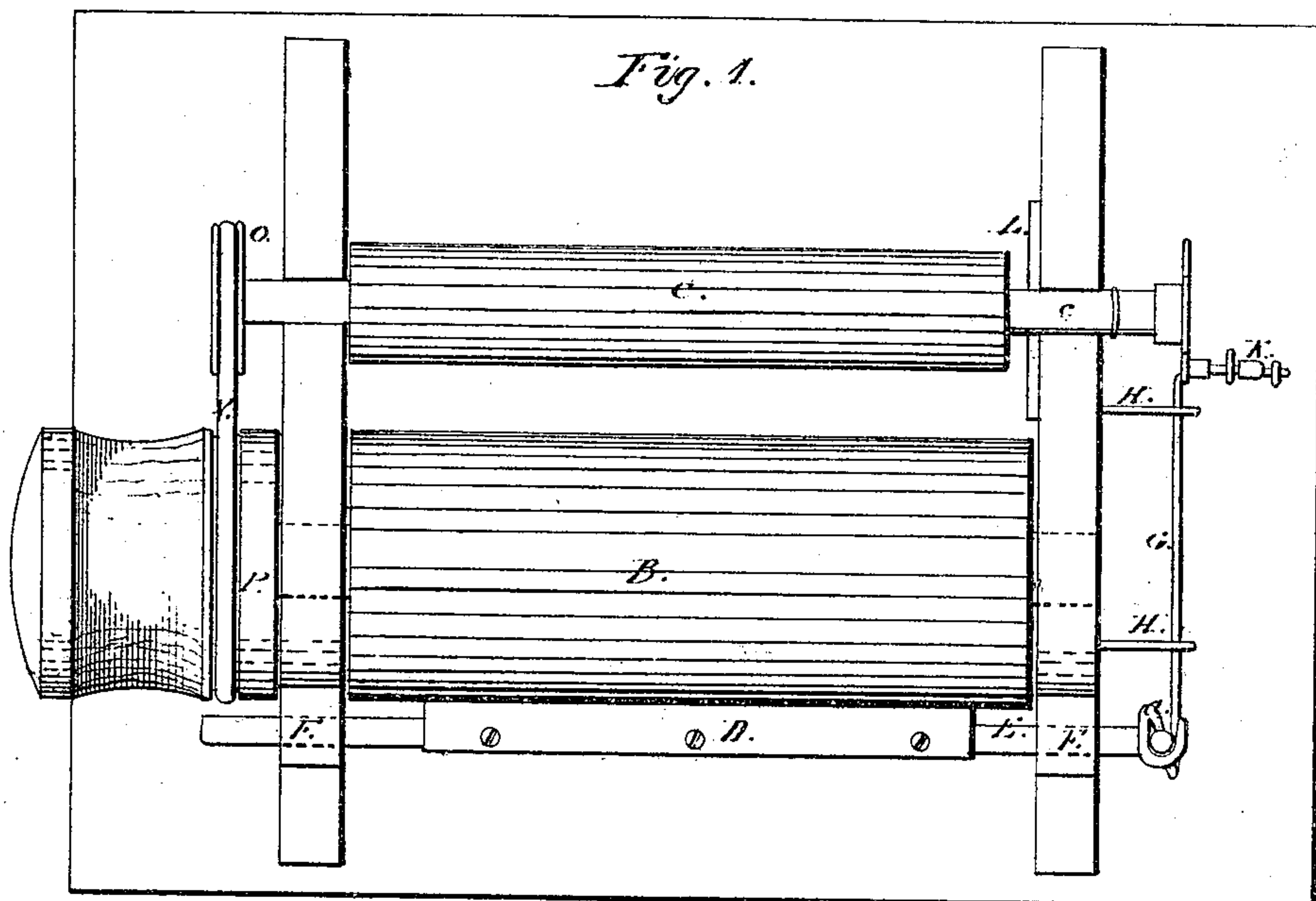


*J. Standing.*  
*Calico Printing Mach.*  
*Nº 14,214. Patented Feb. 5, 1856.*





# UNITED STATES PATENT OFFICE.

JOHN STANDING, OF FALL RIVER, MASSACHUSETTS, ASSIGNOR TO HIMSELF, AND JAMES BAXENDALL, OF PROVIDENCE, RHODE ISLAND.

## MOVEMENT FOR THE DOCTORS OF CALICO-PRINTING MACHINES.

Specification of Letters Patent No. 14,214, dated February 5, 1856.

*To all whom it may concern:*

Be it known that I, JOHN STANDING, of Fall River, in the county of Bristol and State of Massachusetts, have invented a new and useful or Improved Mechanism for Operating or Giving Motion to the Doctor of a Calico-Printing Roller; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1, exhibits a top view of my said invention as applied to the doctor of a printing roller. Fig. 2, is an end elevation of the same. Fig. 3, is a vertical section taken through the doctor and printing roller and so as to exhibit the eccentric or cam constituting a part of my invention.

The object of my machinery is to produce an irregular traverse motion of the doctor in order to prevent the injury that would result to the doctor and engraved surface of its printing cylinder from a regular traverse movement of the doctor. When the doctor is constantly moved with a reciprocating motion between and up to two given points or bounds, there is produced an injurious wear of the engraved surface of the printing cylinder and doctor, as is well known. My invention not only imparts to the doctor its necessary reciprocating movement, but it continually effects a change in the extent thereof, either increasing or diminishing it in such manner that the doctor is seldom or never arrested or brought to a stand at the same spot or place, while it is in the act of performing its office of scraping the cylinder.

In the drawings, A, exhibits the engraved cylinder or roller of a calico printing machine having over it a pressure roller, B, and a leading or guide roller C. Arranged and applied to the printing cylinder, A, is a doctor or scraper D, which is attached to a shaft, E, arranged so as to slide longitudinally in boxes or bearings F, F. One end of this shaft should be so jointed to, embraced by, or connected to the vertical arm *a* of a horizontal lever, G, that when said lever is moved or rocked in its bearings H, H, the shaft shall be moved endwise. The said lever, G, is to be arranged as seen in the drawings and to have two arms, *a*, *b*, standing at right angles to the rest of it,

and about at a right angle to each other, the horizontal arm, *b*, being jointed at its outer end to the lower part of the connecting rod I, whose upper end embraces and turns on a crank or crank pin, K, applied to one end of the shaft, *c*, of the leading roller, C. Near the crank the shaft, *c*, rests on the periphery of an eccentric cam L, which is arranged and turns on a pin or journal M, arranged as seen in Fig. 3. The roller, C, is rotated by means of an endless band, N, working around a pulley, O, fixed upon it as seen in Fig. 1, the endless band being driven by a pulley, P, on the shaft of the printing roller or fixed on some other part of the machine. A spring, R, or its equivalent is employed to maintain the shaft, *c*, in contact with the eccentric, such spring being arranged as seen in Fig. 2. When the shaft, *c*, is put in rotation, a compound movement of the doctor will result, for by the action of the crank, K, connecting rod, I, and lever, G, a reciprocating, rectilinear movement will be imparted to the doctor and such reciprocating movements will be varied or changed as the shaft of the crank is elevated or depressed by the action of the eccentric, L, and the power which maintains the shaft in contact with the eccentric.

I do not claim applying to the shaft of the doctor a mechanism for imparting to it a variable reciprocating motion as such by no means is new, but having invented for such purpose a new mechanism, which is very simple in its construction and efficient in operation, one possessing decided advantages over most if not all others in use to effect such a result.

What I claim as my improvement or invention is—

The combination of the eccentric L, the crank, K, the connecting rod, I, and lever, G, as applied to the shaft, *c*, and the shaft of the doctor and made to operate the doctor substantially as above specified.

In testimony whereof, I have hereunto set my signature this — day of November A. D. 1855.

JOHN STANDING.

Witnesses:

JAMES FORD,  
STILLMAN CADY.