No. 826,013. PATENTED JULY 17, 1906.

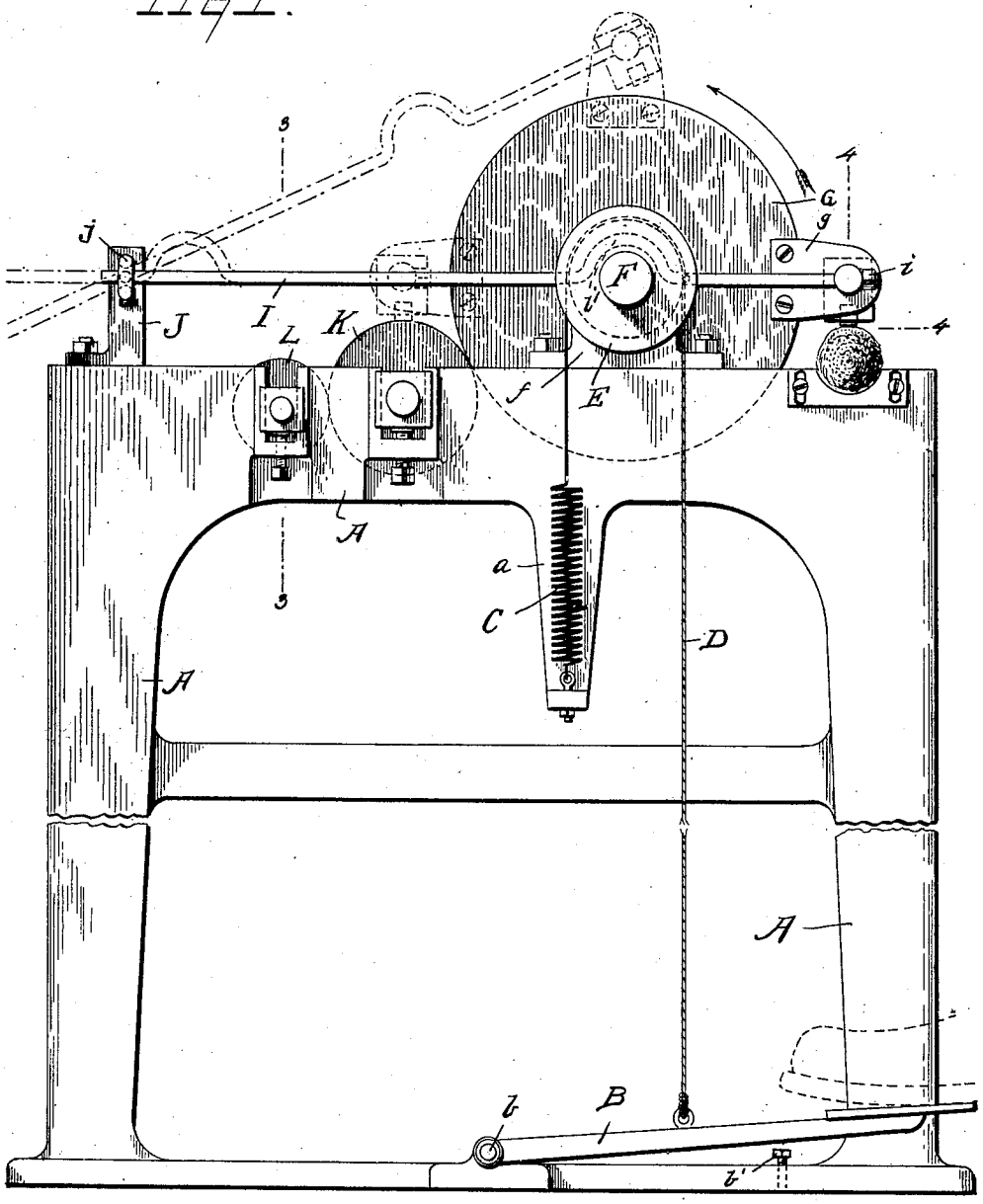
J. BLAIN.

PRINTING MACHINE.

APPLICATION FILED MAY 26, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

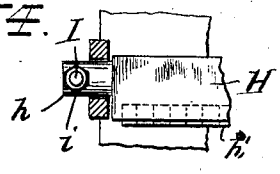


WITNESSES:

E. R. Van Dusen

Low Buck

Fig. 4.



INVENTOR.

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2 SHEETS—SHEET 2.

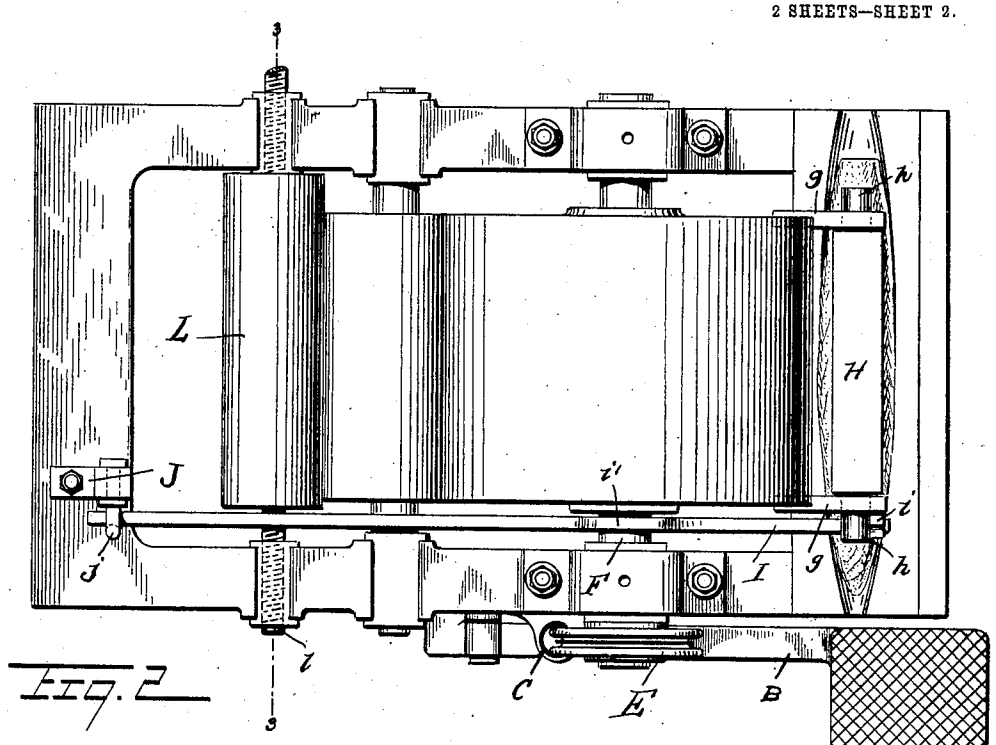

Fig. 2

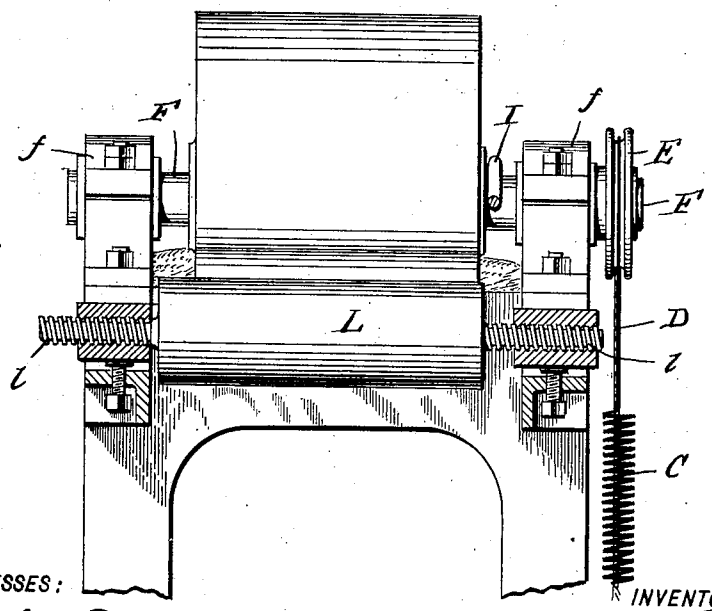

Fig. 3.

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JOSEPH BLAIN, OF BINGHAMTON, NEW YORK.

PRINTING-MACHINE.

No. 826,013. Specification of Letters Patent. Patented July 17, 1906.

Application filed May 26, 1905. Serial No. 262,456.

To all whom it may concern:

Be it known that I, JOSEPH BLAIN, a citizen of the United States, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Printing-Machines, of which the following is a specification.

My invention relates to printing-machines, and more specifically to stamping or branding machines for printing names or other characters on cigars or other circular objects.

The purpose of my invention is to provide a simple, durable, and efficient apparatus of the class mentioned.

The means whereby I obtain the results are fully set forth in the following description and shown in the accompanying two sheets of drawings, in which—

Figure 1 is a side elevation of a cigar-branding machine embodying my invention. Fig. 2 is a plan view of the same. Fig. 3 is a cross-sectional view taken on the line 3 3 of Figs. 1 and 2. Fig. 4 is a detail section of the type-carrier, taken on the line 4 4 of Fig. 1.

My improved cigar-branding machine consists of a frame A, on the top of which are supported the operative parts of the mechanism, while the actuating means, consisting of a treadle B, is pivoted at *b* to the base of the frame.

To a lug *a*, projecting downwardly from the top portion of the frame, is attached a tension-spring C, which is connected by a cord D to approximately the center of the treadle B. Between its points of connection with the spring and treadle the cord D is passed around a sheave or pulley E, mounted on the outer end of a shaft F, journaled in bearings *f f*, carried on the top of the frame A. The shaft F carries midway between its bearings the drum G, to each side of which, near the periphery thereof, is secured a bracket *g*. Supported in these brackets by the journals *h h* is the type-carrier H, in which the type *h'* for the desired impression upon the cigar are secured in any suitable manner. An alining-rod I passes through one of the journals *h* and has a nut *i* on its outer end to prevent its withdrawal from said journal. This rod extends backwardly to the other end of the frame A, where it is passed through a guide *j*, carried by a bracket J, secured to said frame. The guide *j* permits a swinging movement of the rod I, as well as longitudinal movement thereof, for a purpose to be described. The rod I is cranked at *i'* to permit of its being brought to a horizontal position without striking the shaft F.

An ink-distributing roller K is journaled in adjustable bearings *k*, carried by the frame A at the rear of the drum G, so that the peripheries of said roller and of said drum are in contact with each other, and behind said roller K is similarly adjustably journaled an inking-roller L, the shaft *l* of which is screw-threaded in its bearings, so that when said roller L is oscillated it will also have a longitudinal reciprocatory movement.

The cigar being branded is shown at M as lying in a substantially semicircular groove *n*, conforming in contour to a cigar and formed in the upper side of the work-support N, which is mounted on the frame A in front of the drum G. The support N may be adjusted vertically by means of the screws *n'* passing through the slots n^2 in the downwardly-projecting end portions n^3 of said work-support. If desired, the work-support may be arranged for horizontal adjustment also.

An adjustable stop *b'* may be provided to prevent the treadle B from being pressed down so far as to cause the type to break the cigar-wrapper.

The cord D may be wound around the pulley F several times, or other obvious means may be employed to prevent slip.

The operation is as follows: The treadle B being released from the foot of the operator is raised under the influence of the spring C and the shaft F and drum G are rotated in the direction of the arrow, Fig. 1, through substantially one hundred and eighty degrees until the type-carrier A is brought into the position shown in dotted lines in said figure, in which the type are pressed against the surface of the ink-distributing roller K. The frictional contact between the peripheries of the drum G and roller K causes the latter to rotate when the drum rotates, which distributes the ink over a portion of the surface of the drum. Similarly the inking-roller L is rotated by the frictional contact of its periphery with that of roller K, and, as explained, said roller L has also a longitudinal movement, so that the ink is evenly distributed on roller K. The function of the alining-rod I will now be apparent. As the type-carrier is carried upwardly and rearwardly by the drum *g* said rod causes said carrier to swing on its journals until at its highest point it oc-

cupies the intermediate position. (Shown in dotted lines in Fig. 1.) Then as the carrier comes down toward the roller K the rod I swings the same back again until it brings the type squarely upon the periphery of said roller. A cigar having been placed in the support N, the treadle is depressed, which reverses the rotation of the roller and drum, carries the type-carrier from over roller K to over the cigar, and presses the type onto the cigar-wrapper.

While I have described and shown my invention as embodied in a cigar-printing machine, I do not desire to limit myself thereto, as obviously the mechanism is equally well adapted for printing of different kinds, and I consider the scope of my invention to be expressed in the following claims.

I claim—

1. In a printing-machine, the combination with the frame thereof, a work-support thereon, a drum journaled therein, an ink-disributing roller carried thereby in peripheral contact with said drum, means to oscillate said drum, a type-carrier pivoted on the periphery of said drum, a rod attached to said type-carrier and guided at its other end in said frame, whereby the type in said carrier are alternately brought into contact with said ink-distributing roller and with the article to be printed carried by said work-support.

2. In a printing-machine, the combination with the frame thereof, of a work-support adjustably mounted thereon, a drum journaled therein, an ink-distributing roller adjustably carried thereby in peripheral contact with said drum, an inking-roller adjustably carried thereby in peripheral contact with said ink-distributing roller, a type-carrier pivotally carried on the periphery of said drum, a treadle and spring for alternately rotating said drum in opposite directions, and an alining-rod connected at one end to said type-carrier and guided at its other end in said frame, whereby said type-carrier is caused to swing to bring its type alternately in contact with said ink-distributing roller, with the work.

In testimony whereof I have affixed my signature in presence of two witnesses.

JOSEPH BLAIN.

Witnesses:

MABEL GORMAN,

MAUD DAVEY.