

(No Model.)

I. C. DAVIS & J. BROWN.

MACHINE FOR PRINTING THE PERIPHERIES OF SPOOLS AND OTHER  
CIRCULAR BODIES.

No. 452,598.

Patented May 19, 1891.

Fig. 1.

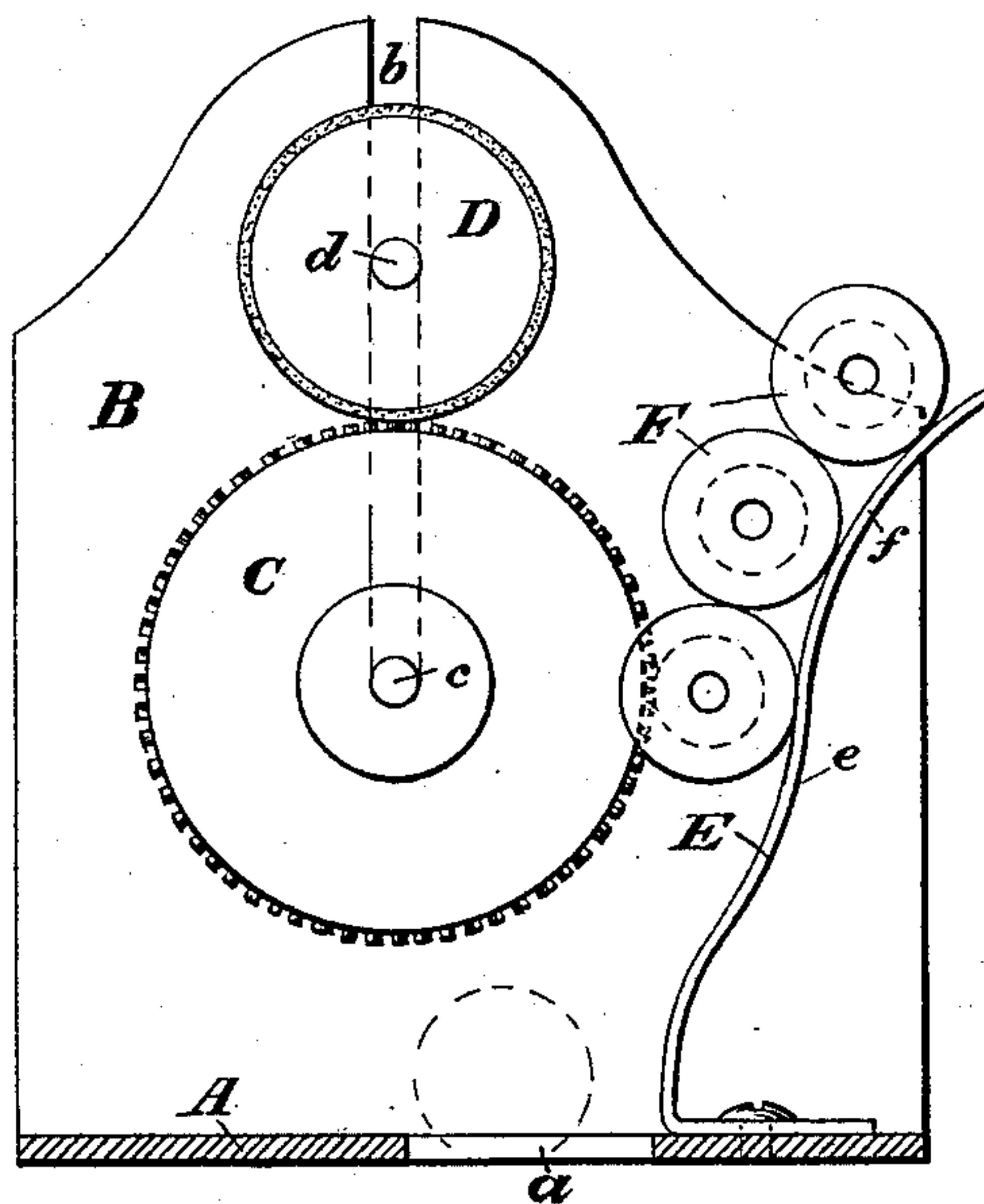
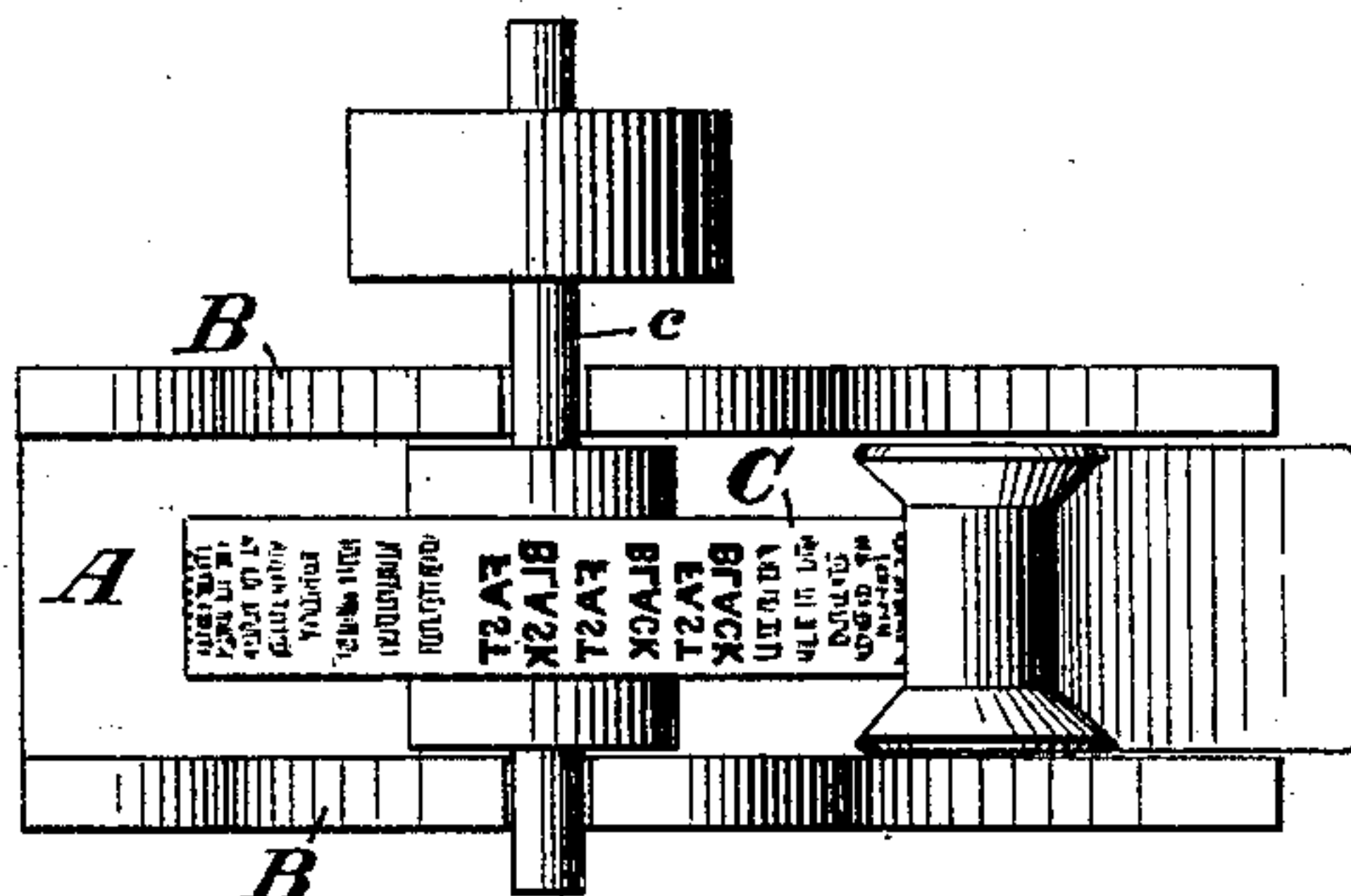


Fig. 2.



Witnesses:

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# UNITED STATES PATENT OFFICE.

INA C. DAVIS, OF NEWARK, AND JOHN BROWN, OF KEARNEY, ASSIGNORS  
TO THE KERR THREAD COMPANY, OF NEWARK, NEW JERSEY.

MACHINE FOR PRINTING PERIPHERIES OF SPOOLS AND OTHER CIRCULAR BODIES.

SPECIFICATION forming part of Letters Patent No. 452,598, dated May 19, 1891.

Application filed February 4, 1891. Serial No. 380,116. (No model.)

*To all whom it may concern:*

Be it known that we, INA C. DAVIS, of Newark, in the county of Essex and State of New Jersey, and JOHN BROWN, of Kearney, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Machines for Printing Peripheries of Spools and other Circular Bodies, of which the following is a specification, reference being had to the accompanying drawings.

The principal object of this invention is to obtain a very simple machine for printing the peripheral surfaces of spools for sewing-thread and sewing-silk and for other fabrics; but a machine embodying our invention may also be used for printing the peripheries of other cylindrical or circular bodies.

Figure 1 is a side view, partly in section, of a machine for printing spools constructed according to our invention. Fig. 2 is a top view of the same, the inking-roller being omitted to expose the printing-roller.

Similar letters of reference designate corresponding parts in both the figures.

A is a bed-plate, on which are arranged two standards B B, which contain the bearings for the shaft *c* of a printing-roller C, on which the stereotype or form of matter to be printed from is set up or produced in metal or such composition as is commonly used or suitable for printing type or forms. This matter should surround the whole circumference of the roller, but will generally consist of a series of repetitions of matter that will only occupy a small portion of the circumference, as may be understood by reference to Fig. 2.

Above the printing-roller C is an inking-roller D, which may be supplied with ink in any suitable manner. This inking-roller is represented as having its shaft *d* fitted to upright slots or housings *b* in the standards B, so that the weight of the said roller will produce the necessary pressure for inking the printing-roller.

E is a yielding guide, which serves the purpose of guiding the spools F or circular bodies to be printed to the periphery of the printing-roller. This guide is represented as consisting of a curved plate of resilient metal, the bottom of which is secured to the bed-plate A and facing the periphery of the printing-

roller C. A portion *e* of this plate conforms approximately, as shown in Fig. 1, to the roller and its normal position is such that the circular bodies to be printed, which I will hereinafter term "spools," will in passing between the said roller and said plate slightly press back the said plate and be pressed by the said plate against the printing-surface of the roller C with force enough to take impressions therefrom. The upper part *f* of the said plate or guide E is flared outward from the roller C, as shown in Fig. 1, that the spools to be printed may enter easily between the said roller and the said plate or guide. Behind the bottom of the said plate or guide there is an opening *a*, through which the spools may drop into a suitable receptacle after having been printed by passing between the said plate or guide and the roller C. The standards B B have their inner faces parallel with the planes of revolution of the roller C and they are set at a distance apart equal to the length of the spools to be printed, so that they may serve as guides to keep the length of the spools in proper relation to the printing-roller C. The said guides formed by the standards and the flaring upper portion *f* of the yielding guide E combine with the roller C to form a hopper, into which the spools may be fed without any special care by a child or unskilled person. The spools placed in the hopper formed as above described descend by gravitation one after another between the yielding plate or guide E and the printing-roller C, and are caused to rotate on their own axes and at the same time to be carried downward by the contact with them of the printing-surface of the said roller; but they only remain between the said guide and roller long enough to be printed and after that they drop to and through the opening *a*.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The combination, with a rotary type-roller, of a yielding guide facing the periphery of said roller for the purpose of conducting to said roller spools or other circular bodies to be printed and of pressing the said bodies against the printing-surface of said roller, substantially as herein set forth.

2. The combination of a rotary type-roller,



a stand therefor, a yielding guide facing the periphery of said roller, and stationary guides having their faces parallel with the planes of revolution of said roller for the purpose of  
5 guiding to the said roller spools or other circular bodies to be printed, substantially as herein set forth.

3. The combination, with a rotary type-roller and guides parallel with the planes of  
10 rotation thereof, of a guide consisting of a plate of resilient metal facing the periphery of the said roller and the upper portion of

which flares outward from the roller to form with the first-mentioned guides and the roller a hopper, into which spools or cylindrical  
15 bodies to be printed may be dropped to be fed to the said roller, substantially as herein set forth.

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Witnesses:

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