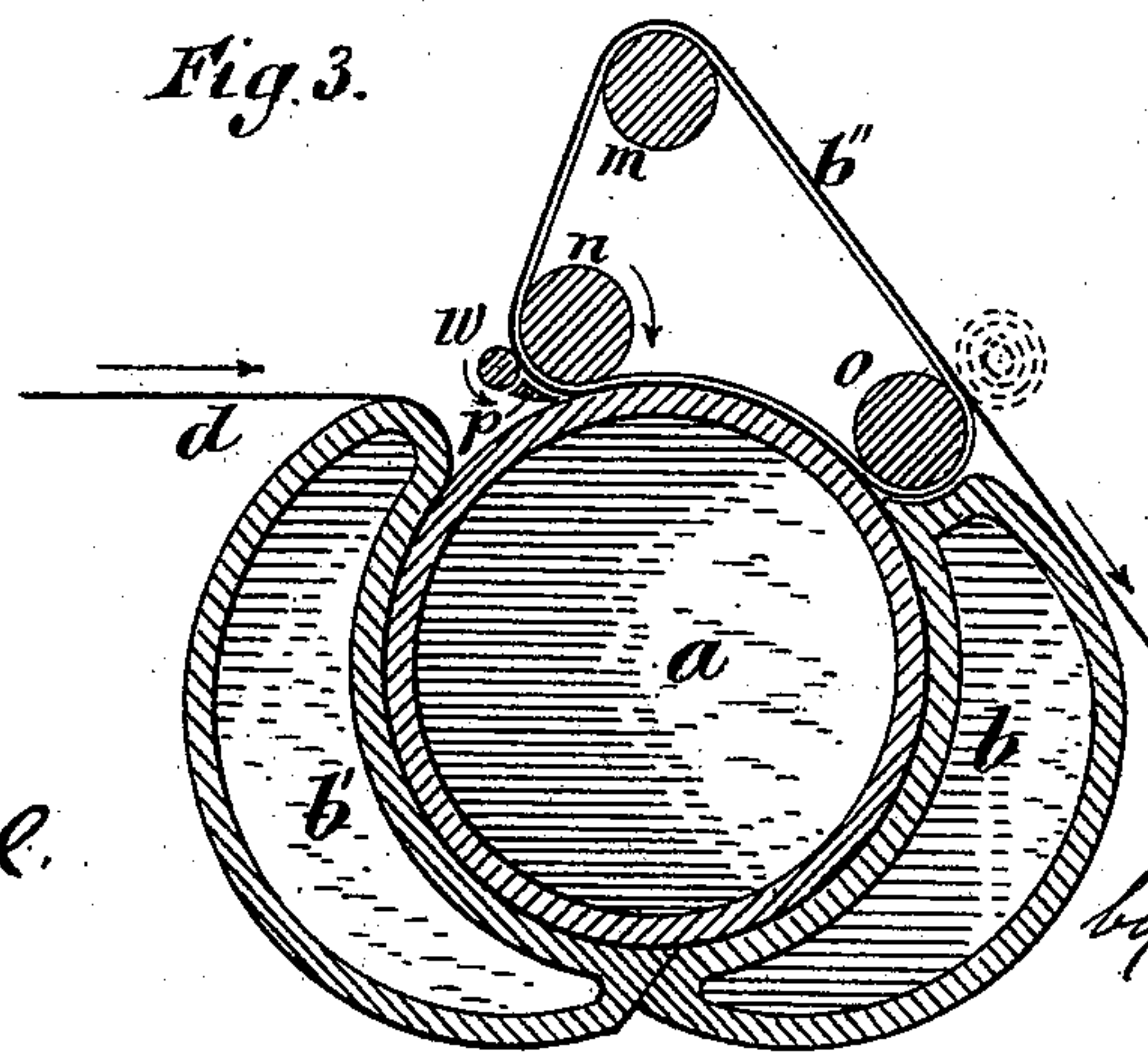
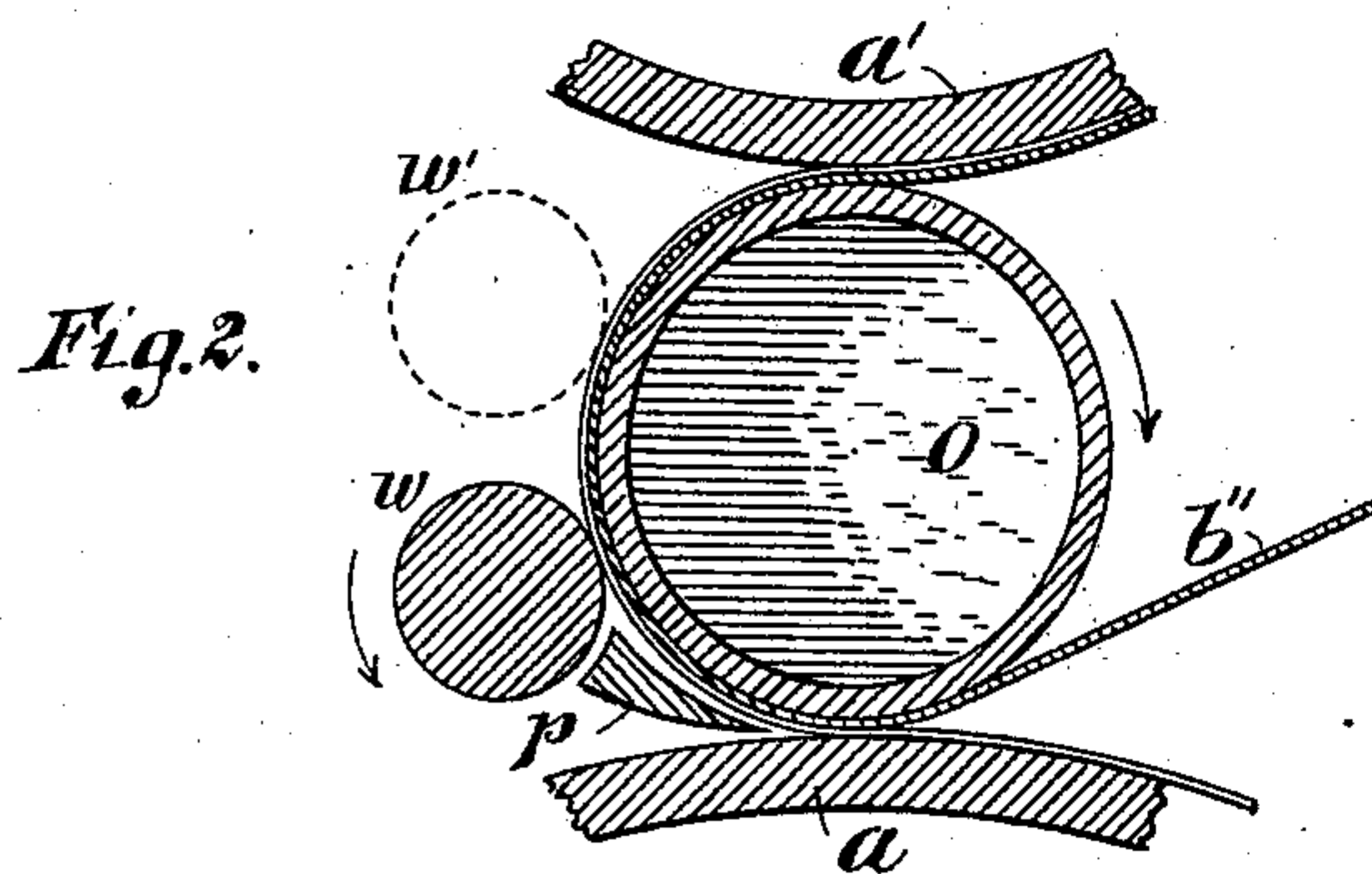
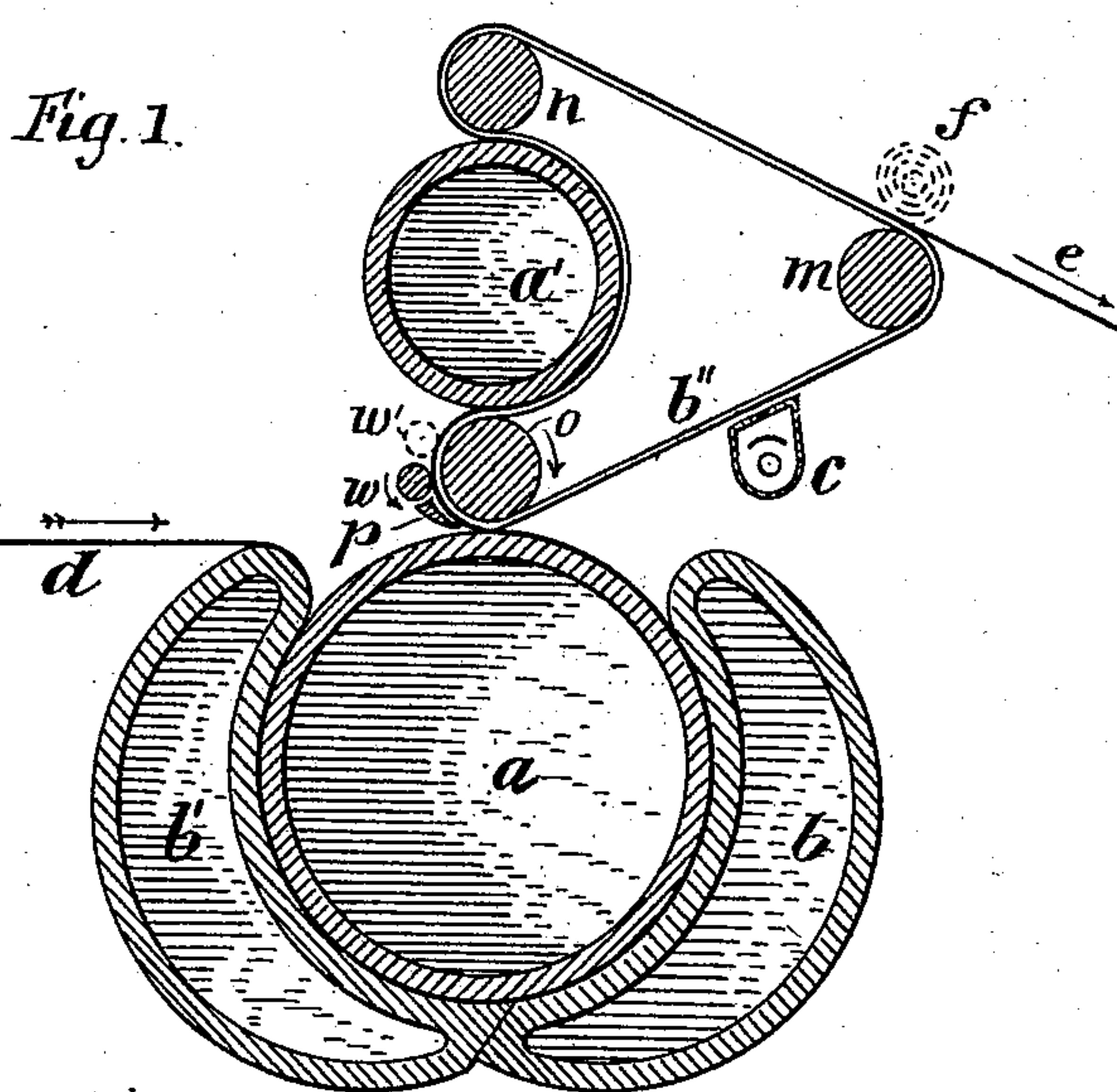


(No Model.)

D. GESSNER.  
CLOTH PRESSING MACHINE.

No. 387,296.

Patented Aug. 7, 1888.



Witnesses  
*A. H. Driscoll.*  
*A. Raban.*

Inventor.  
*David Gessner.*  
by *Gifford & Brown.*  
*Atty's.*



# UNITED STATES PATENT OFFICE.

DAVID GESSNER, OF WORCESTER, MASSACHUSETTS.

## CLOTH-PRESSING MACHINE.

SPECIFICATION forming part of Letters Patent No. 387,296, dated August 7, 1888.

Application filed June 9, 1887. Renewed June 16, 1888. Serial No. 277,354. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID GESSNER, of Worcester, in the State of Massachusetts, have invented a certain new and useful Improvement in Cloth-Pressing Machines, of which the following is a specification.

The subject of the present case is an improvement or modification of the machine described in my application filed September 4, 1886, Serial No. 212,702, and it will be understood that the parts which I am about to describe herein are applicable to the machine therein described, so that a complete description of said machine will be unnecessary.

The drawings accompanying this specification show forms of mechanism which I at present believe to be the best for embodying my invention, although I do not desire to confine myself to the forms of mechanism here displayed nor to the use of all the parts, since I am well aware that some of the parts may be used with advantage without the others and that the form of the various parts may be greatly modified.

25 Figure 1 is a cross section of part of a pressing-machine embodying my invention. Fig. 3 shows a modification. Fig. 2 is a detail of a part of Fig. 1, the roll *o* being, however, hollow to admit of steam heating.

30 Similar letters of reference designate corresponding parts in all the figures.

I will first describe the arrangement shown in Figs. 1 and 2.

35 *a* is the principal pressing-cylinder, in conjunction with which are the press-beds or bed-plates *b b'*.

*a'* is a second pressing-cylinder.

40 *m n o* are rollers around which passes the band or apron *b''*. The roller *o*, when in position for operation, presses the band or apron *b''* against the surface of the cylinder *a* and also against cylinder *a'*. The roller *n* presses the apron against the surface of the cylinder *a'*, and the tension of the apron upon the rollers *m n o* is such that it exerts pressure against the surface of the cylinder *a'* all the way from the roller *o* to the roller *n*.

45 *p* is a stripper arranged to insure the delivery of the cloth from the surface of the cylinder *a* onto the apron *b''*.

50 *w w'* are rollers which may be employed to

press the cloth against the surface of the apron, so as to insure its adhesion to the apron.

In Fig. 2 the roller *o* is shown as enlarged and made hollow, so as to provide for heating 55 by steam; and it may be remarked that the opposite roll, *n*, may be constructed in the same manner. The cylinders *a a'* and the bed-plates *b b'* are likewise made hollow in order to provide steam-chambers for heating. 60

A steamer of ordinary construction may be employed, as at *c*, Fig. 1; but this would only be useful with certain kinds of material.

In the operation of this invention the cloth enters in the direction of the arrow *d* and receives its first pressing in contact with the cylinder *a*. Before leaving it is pressed into contact with the felt apron *b''* under the pressure exerted between the roller *o* and the cylinder *a*, so as to create an adhesion between 65 the cloth and the apron. The stripper *p* and the rollers *w w'*, if employed, will assist in maintaining this adhesion until the cloth passes between the cylinder *a'* and the apron *b''*. The cloth is pressed between the apron *b''* and the cylinder *a'* and passes from this pressure out 70 of the machine. 75

It may sometimes be found convenient to arrange a roller upon which the cloth is to be wound, as at *f*, Fig. 1, so that the cloth is 80 wound into a roll immediately upon the apron.

Among the advantages of this invention may be mentioned that the cloth, after receiving its pressure by the first cylinder and the bed-plates, is immediately received upon the apron, 85 upon which it is held in its full width as it leaves the cylinder *a*. It has no opportunity to narrow up, as would be the case if it had to travel a distance from the cylinder *a* to the apron. The apron *b''* being pressed into contact with the face of the cloth will tend to remove the luster which is produced by the first pressure. This can be regulated to a certain extent by the application of the steamer in connection with the apron *b''*. 90 95

I will now describe the modification shown in Fig. 3.

The cylinder *a* and bed-plates *b* and *b'* are the same as before. The cylinder *a'* is omitted. The rollers *m n o* are arranged as shown, 100 the rollers *o* and *n* being so located as to press the part of the apron between them against the



surface of the cylinder *a*. In this way the function performed by the cylinder *a'* in the modification first described is transferred to the cylinder *a*, and the cloth is still pressed  
5 against the apron before leaving the cylinder *a*. I prefer to locate the roller *o* close to the bed-plate *b*, as shown, and the adjoining edge of the adjacent bed-plate may be hollowed out, so that the apron will take hold of the cloth  
10 immediately where it leaves the bed-plate to prevent narrowing of the cloth and exclude air.

I have shown two bed-plates as being used in connection with cylinder *a*; but this number is merely preferable.

15 Since the modification shown in Fig. 3 will be made the subject of another application, I do not claim the same herein excepting as it may come within the scope of the general claims in this application.

20 I claim—

1. The combination, with the cylinder *a* and its attendant bed-plates, of the apron *b''* and rollers supporting the same, substantially as

described, whereby the cloth is pressed into contact with the apron before leaving the cyl- 25  
inder *a*, and a second cylinder, *a'*, between which and the apron the cloth is pressed, substantially as described.

2. In combination, the cylinder *a* and its attendant bed-plate or bed-plates, the cylinder 30  
*a'*, the apron *b''*, and rollers supporting said apron, one of said rollers being interposed between said two cylinders, and the said apron being pressed between it and each of the cylinders, substantially as described. 35

3. The combination, with the cylinder *a* and its attendant bed-plates, of the apron *b''* and rollers supporting the same, substantially as described, whereby the cloth is pressed into contact with the apron before leaving the cyl- 40  
inder *a*, substantially as described.

DAVID GESSNER.

Witnesses:

D. H. DRISCOLL,  
W. A. RABAN.

It is hereby certified that in Letters Patent No. 387,296, granted August 7, 1888, upon the application of David Gessner, of Worcester, Massachusetts, for an improvement in "Cloth-Pressing Machines," errors appear in the printed specification requiring correction as follows: In lines 22 and 37, page 2, insert the words *bed-plate or* between the words "attendant" and "bed-plates"; and that the Letters Patent should be read with these corrections therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 14th day of August, A. D. 1888.

[SEAL.]

D. L. HAWKINS,  
*Assistant Secretary of the Interior.*

Countersigned :

BENTON J. HALL,  
*Commissioner of Patents.*