

(No Model.)

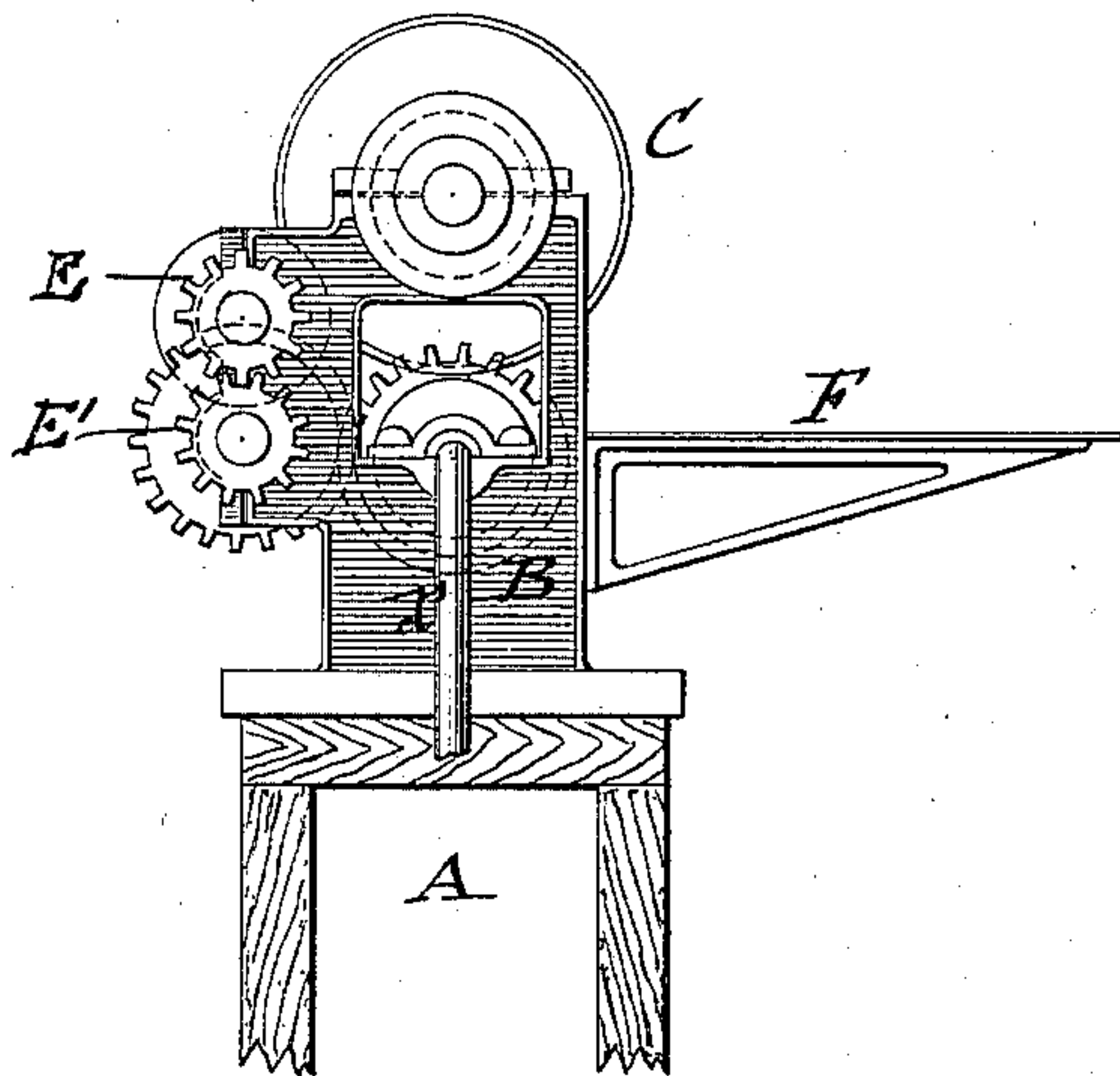
J. HAWLOWETZ.

MACHINE FOR SCRAPING THE QUILLS OF OSTRICH AND OTHER FEATHERS.

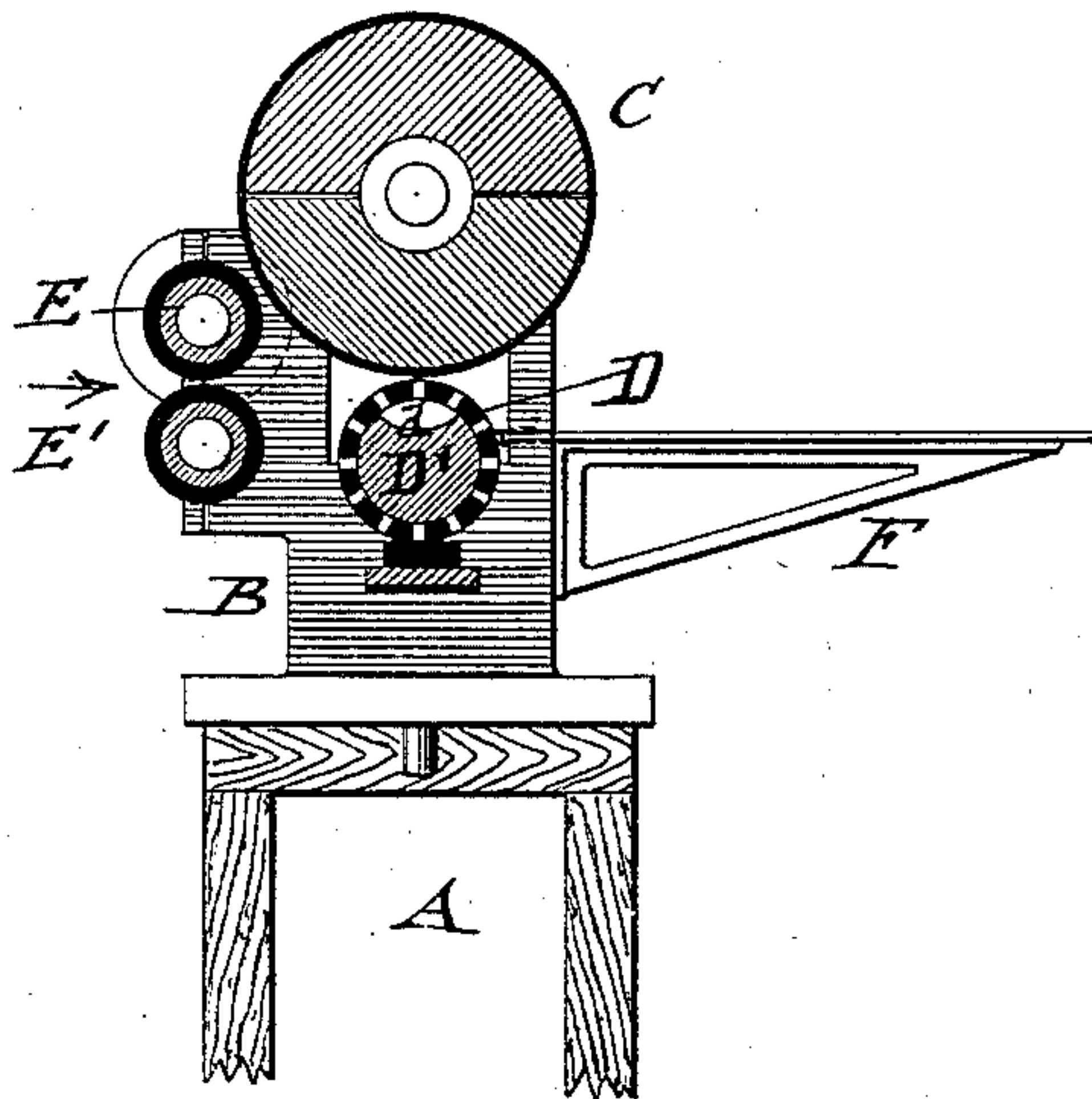
No. 300,071.

Patented June 10, 1884.

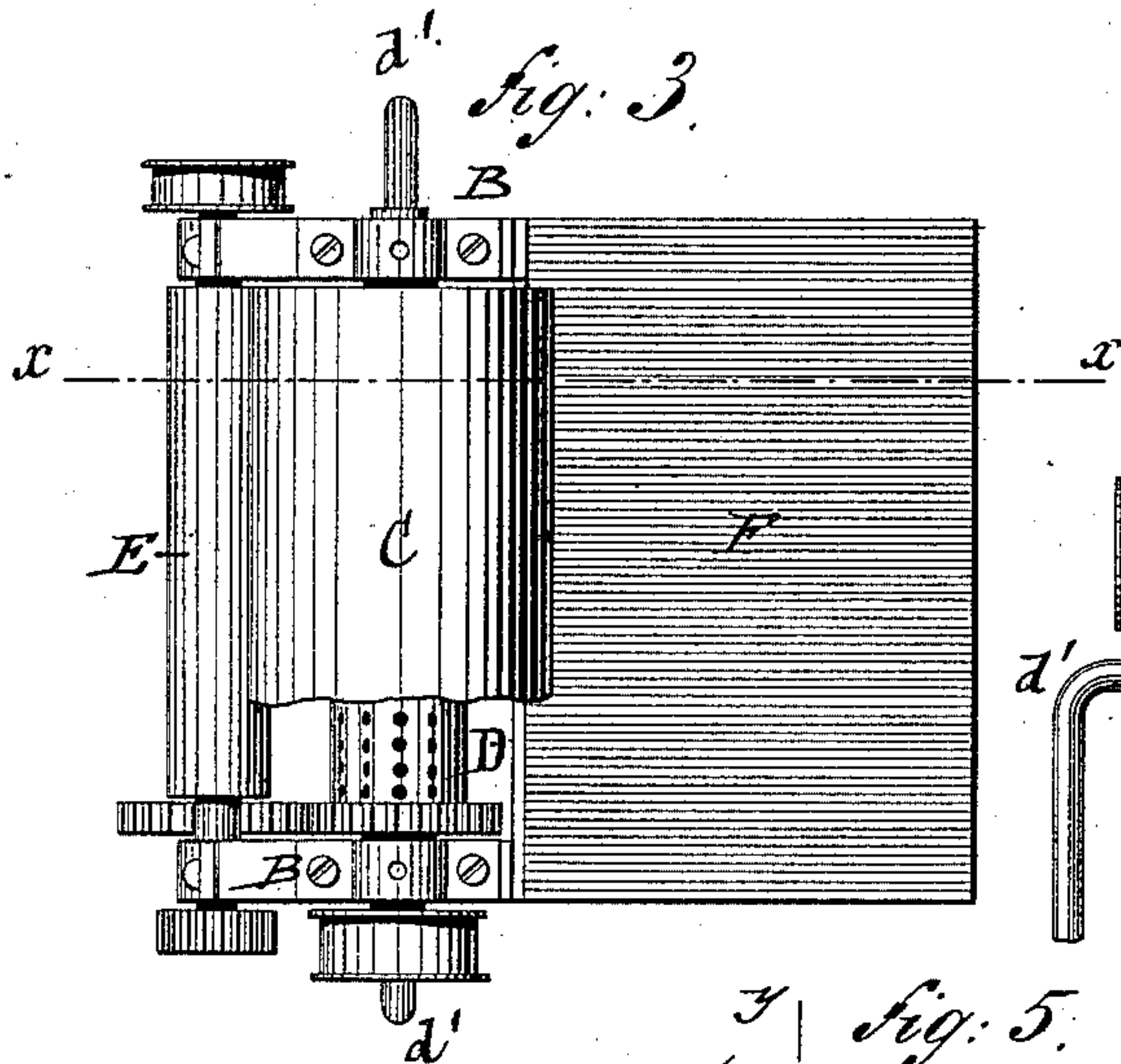
*Fig. 1.*



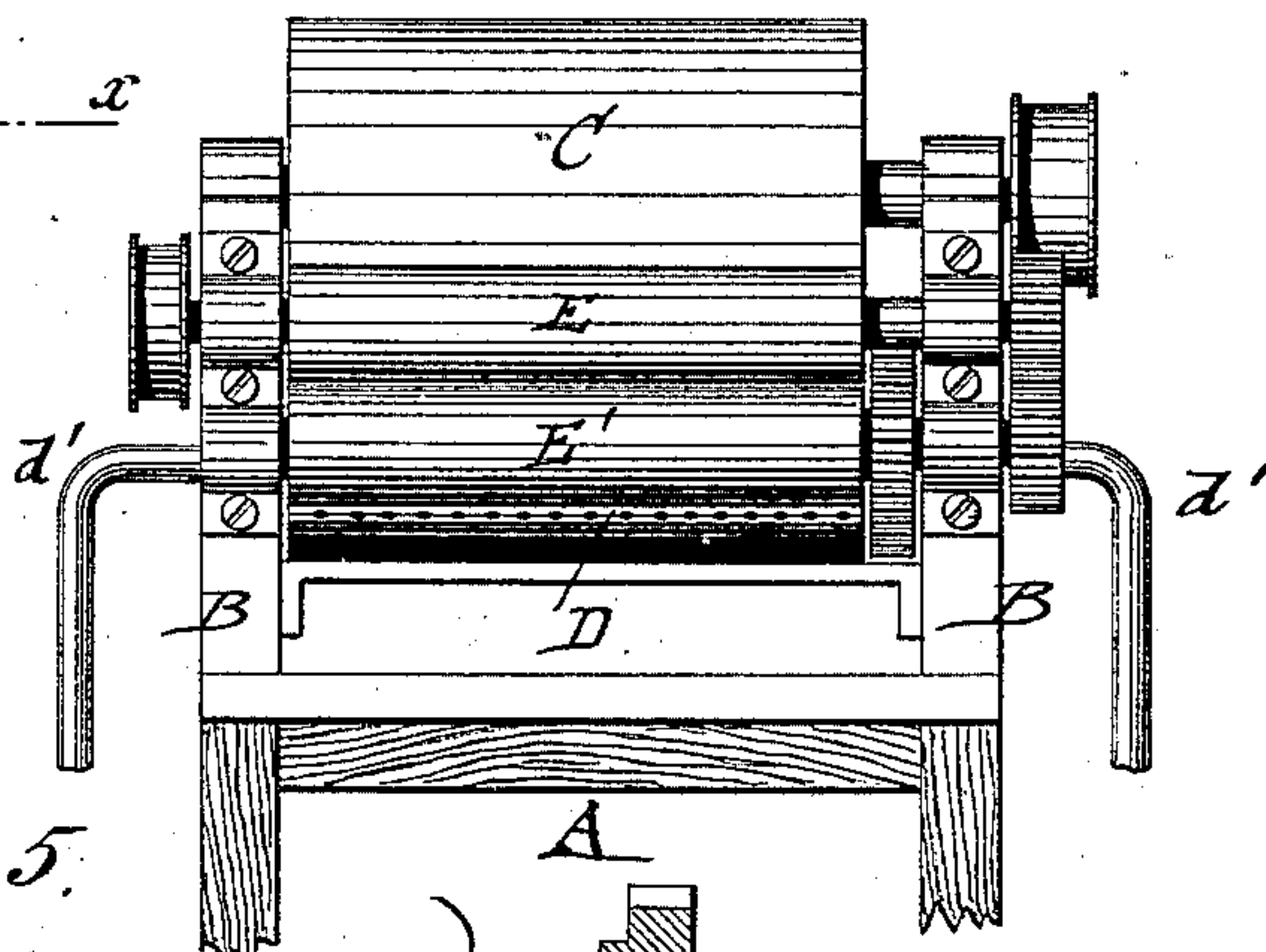
*Fig. 2.*



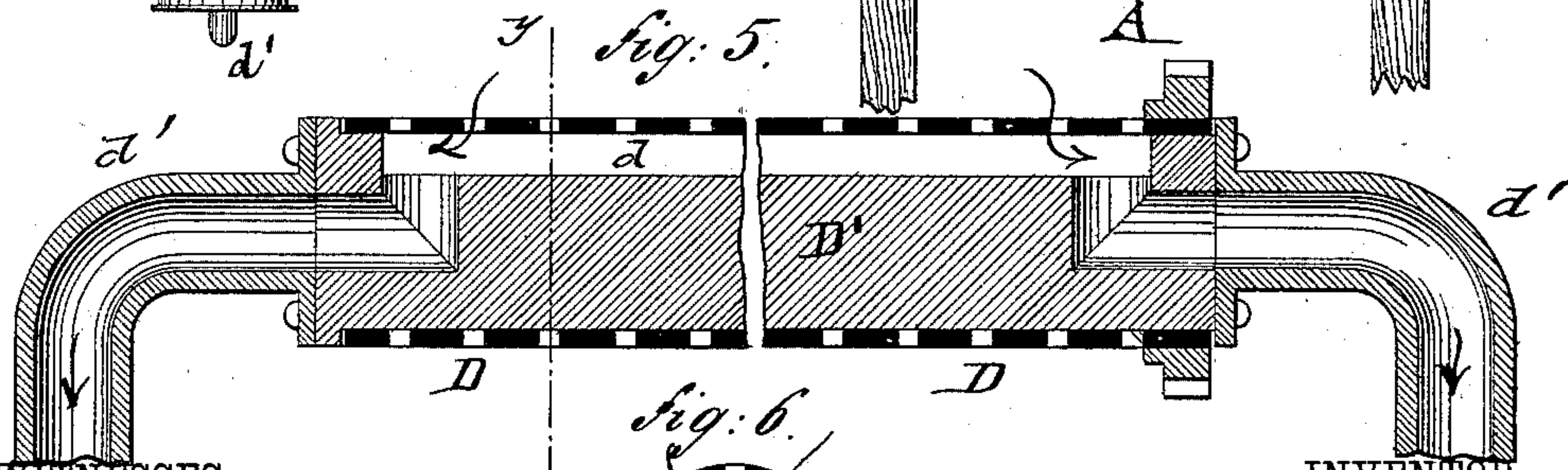
*Fig. 3.*



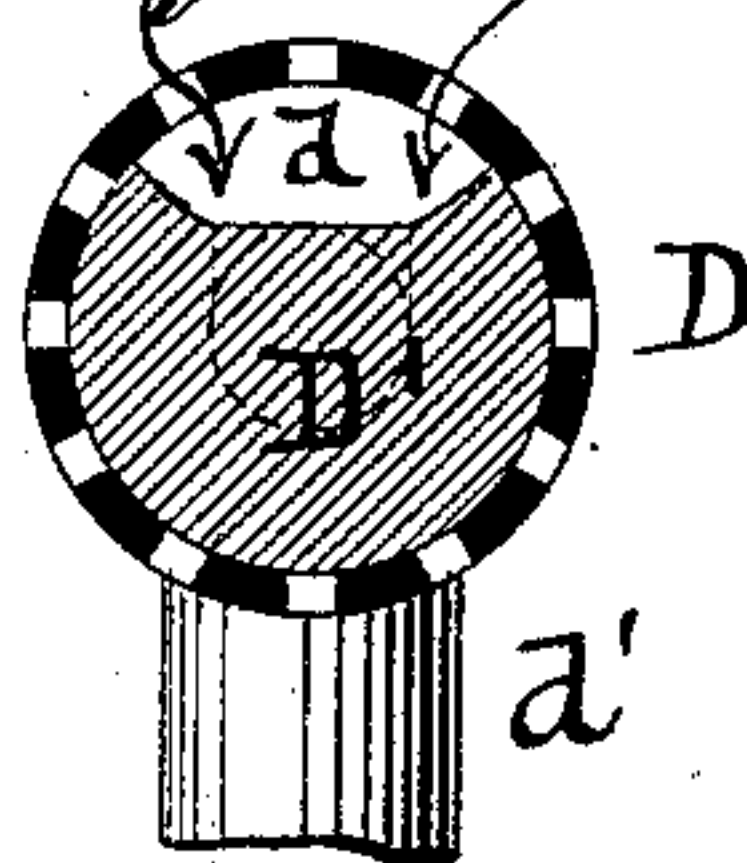
*Fig. 4.*



*Fig. 5.*



*Fig. 6.*



WITNESSES:

*A. Schehl.*  
*Adney Mann*

INVENTOR

*John Hawlowetz*  
BY *Loepr & Paegener*  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

JOHN HAWLOWETZ, OF NEW YORK, N. Y.

MACHINE FOR SCRAPING THE QUILLS OF OSTRICH AND OTHER FEATHERS.

SPECIFICATION forming part of Letters Patent No. 300,071, dated June 10, 1884.

Application filed January 25, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN HAWLOWETZ, of the city, county, and State of New York, have invented certain new and useful Improvements in Machines for Scraping the Quills of Ostrich and other Feathers, of which the following is a specification.

In preparing ostrich and other feathers for use for trimmings in ladies' hats, &c., the face and back of the quills have heretofore been scraped and smoothed by hand by using the sharp edge of a small piece of glass. This was a tedious and slow method, by which the scraping of the quills could not be accomplished in a uniform manner.

The object of my invention is to furnish a machine by which the quills of ostrich and other feathers may be quickly and uniformly scraped and smoothed at a considerable saving of time and labor; and the invention consists of a revolving scraping-roller, a perforated shell revolving below the same around a fixed longitudinally-recessed core, revolving feed-rollers at one side of the scraping-roller, and a table at the other side of the same. The vanes of the feathers are drawn close to the perforated shell by the action of a suction-fan connected by pipes to the longitudinal channel of the core, so that the quills are scraped without injury to the vanes by the scraping-roller.

In the accompanying drawings, Figure 1 represents a side elevation; Fig. 2, a vertical transverse section on line *x x*, Fig. 3; Fig. 3, a plan with a portion broken away, and Fig. 4 a front elevation of my improved machine for scraping the quills of ostrich and other feathers. Fig. 5 is a detail vertical longitudinal section through the perforated suction-roller; and Fig. 6, a detail vertical transverse section of the same on line *y y*, Fig. 5.

Similar letters of reference indicate corresponding parts.

A in the drawings represents a table or other support, and B B are the upright standards which support the different parts of my improved machine for scraping the quills of ostrich and other feathers. The standards B B are provided with bearings for a rapidly-revolving wooden roller, C, the surface of which is covered with sand-paper or other equivalent abrasive material. Below the roller C is ar-

anged a cylindrical perforated shell, D, which revolves around a fixed core, D', that is provided at its upper part with a channel, *d*, that extends from end to end of the core, said channel being connected by pipes *d'* with a suction-fan. (Not shown in the drawings.) The feathers are fed to the roller C and shell D by rubber-covered feed-rollers E E', then taken up by the scraping-roller C and perforated shell D, passed through between the same, and then dropped onto a table, F, arranged at the opposite side of the machine. The scraping-roller C is quickly revolved by a separate belt-and-pulley transmission from a counter-shaft, while the perforated shell D is revolved by gear-wheels from the shaft of the lower feed-roller, F', which receives rotary motion by a second gear-wheel connection from the upper feed-roller, E, the shaft of which is rotated by a belt-and-pulley transmission from a power-shaft. When the feathers are fed by the feed-rollers to the revolving scraping-roller C and shell D, they are taken up by the same. The vanes of the feathers are drawn by the currents of air passing through the perforation of the shell D by the action of the suction-fan into close contact with the latter, so that they are not exposed to the abrading action of the scraping-roller C. The quills, however, are exposed to the abrading action of the roller C as the feathers pass through between the roller C and shell D. When the feathers have passed through between the roller C and shell D, the feathers are dropped on the table F, which is extended close up to the shell D, so as to exert a scraping action thereon and take off the feathers. The quills are thus scraped at one side. They are then passed a second time through the machine with the scraped side of the quills turned down, so that the opposite side of the quills is exposed to the action of the abrading-roller C. In this manner the scraping and smoothing of the quills of feathers of all kinds can be accomplished quickly and conveniently by machinery without injury to the vanes. The work is done quicker and in a more uniform manner and a better finish imparted to the feathers than by hand-scraping.

I am aware that pairs of abrading-rollers and feed-rollers working in connection therewith, for scraping the quills of feathers used



in the manufacture of dusters, have been used heretofore; and I therefore do not claim this feature, broadly.

Having thus described my invention, I claim  
5 as new and desire to secure by Letters Patent—

1. The method herein described of scraping the quills of ostrich and other feathers, which consists in subjecting the quills to the abrading action of a rapidly-revolving scraping-  
10 roller and simultaneously removing the vanes out of the path of said roller by atmospheric suction, substantially as set forth.

2. The combination of a revolving abrading-roller, a perforated revolving shell below the  
15 same, and means for sucking in the air through the perforations of the shell, substantially as set forth.

3. In a machine for scraping the quills of feathers, the combination of a revolving abrading-  
20 roller, a revolving perforated shell be-

low the same, a fixed core inside of the shell, said core being provided with a longitudinal channel and pipes connecting the ends of the channel with a suction-fan, substantially as described.

4. The combination of an abrading-roller, a perforated revolving shell below the same, a fixed interior core provided with an air-channel at the upper part, suction-pipes connected to the ends of the air-channel, revolving feed-  
30 rollers at one side of the abrading-roller, and a delivery-table at the other side thereof, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name in pres-  
35 ence of two subscribing witnesses.

JOHN HAWLOWETZ.

Witnesses:

PAUL GOEPEL,  
SIDNEY MANN.