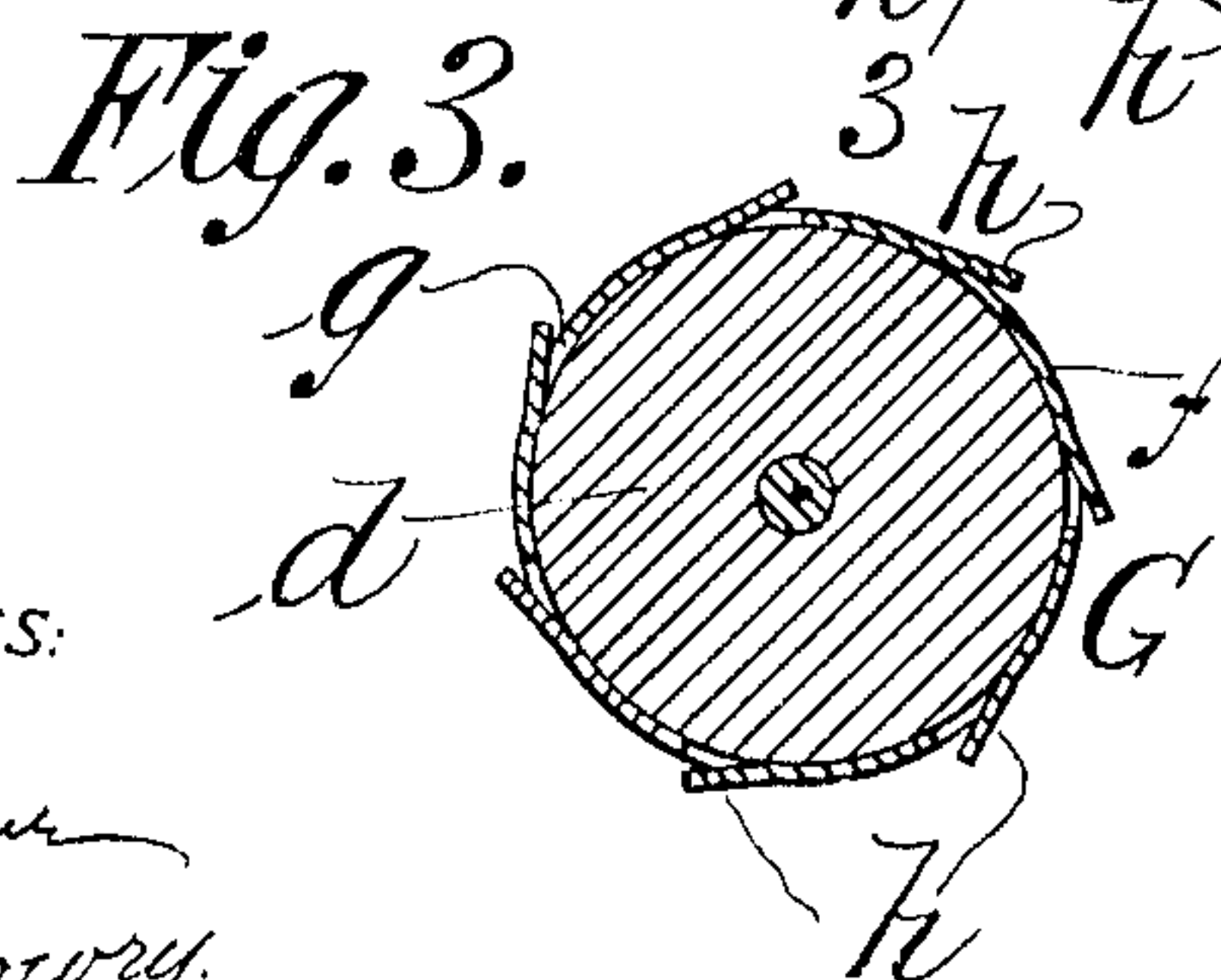
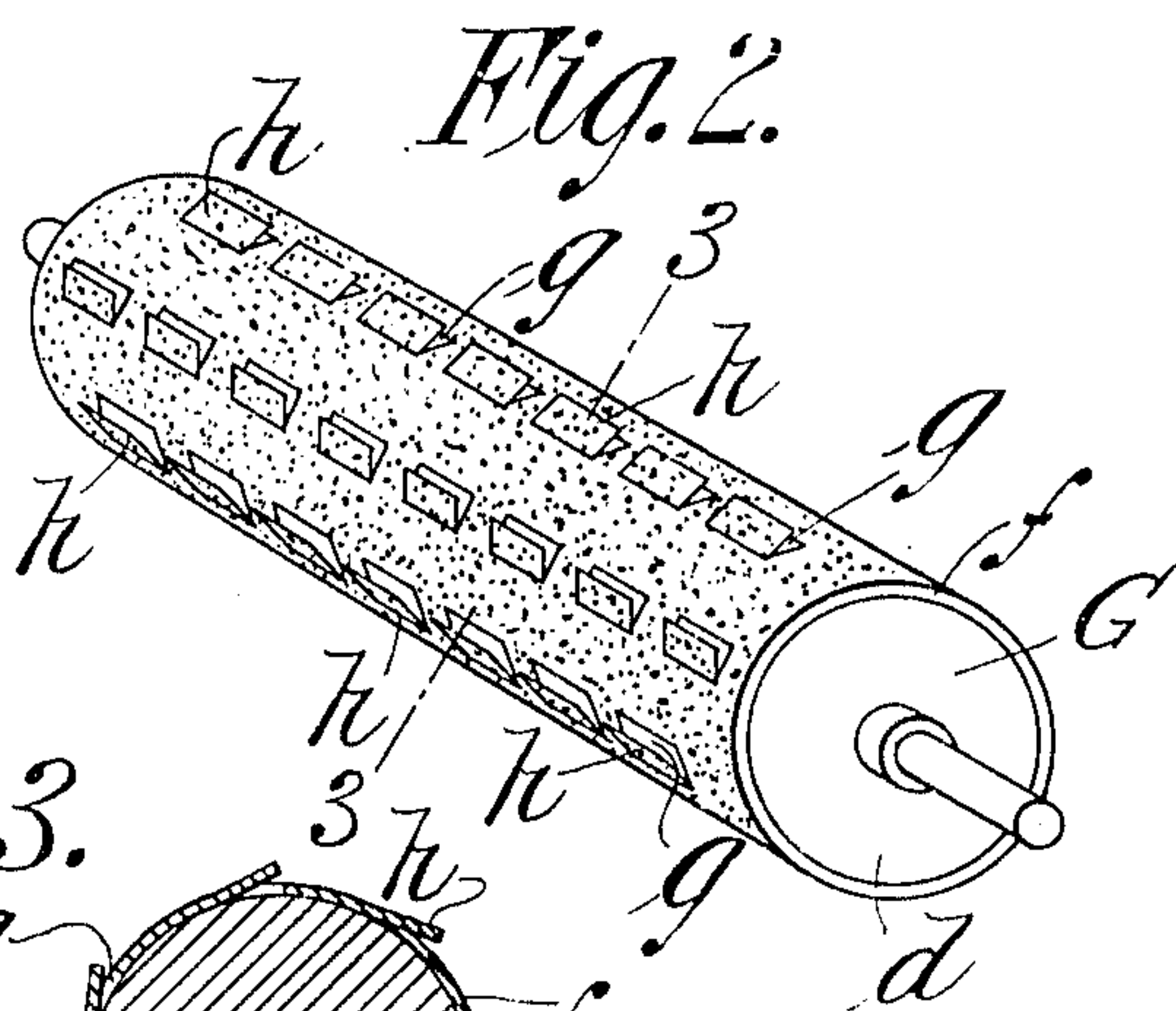
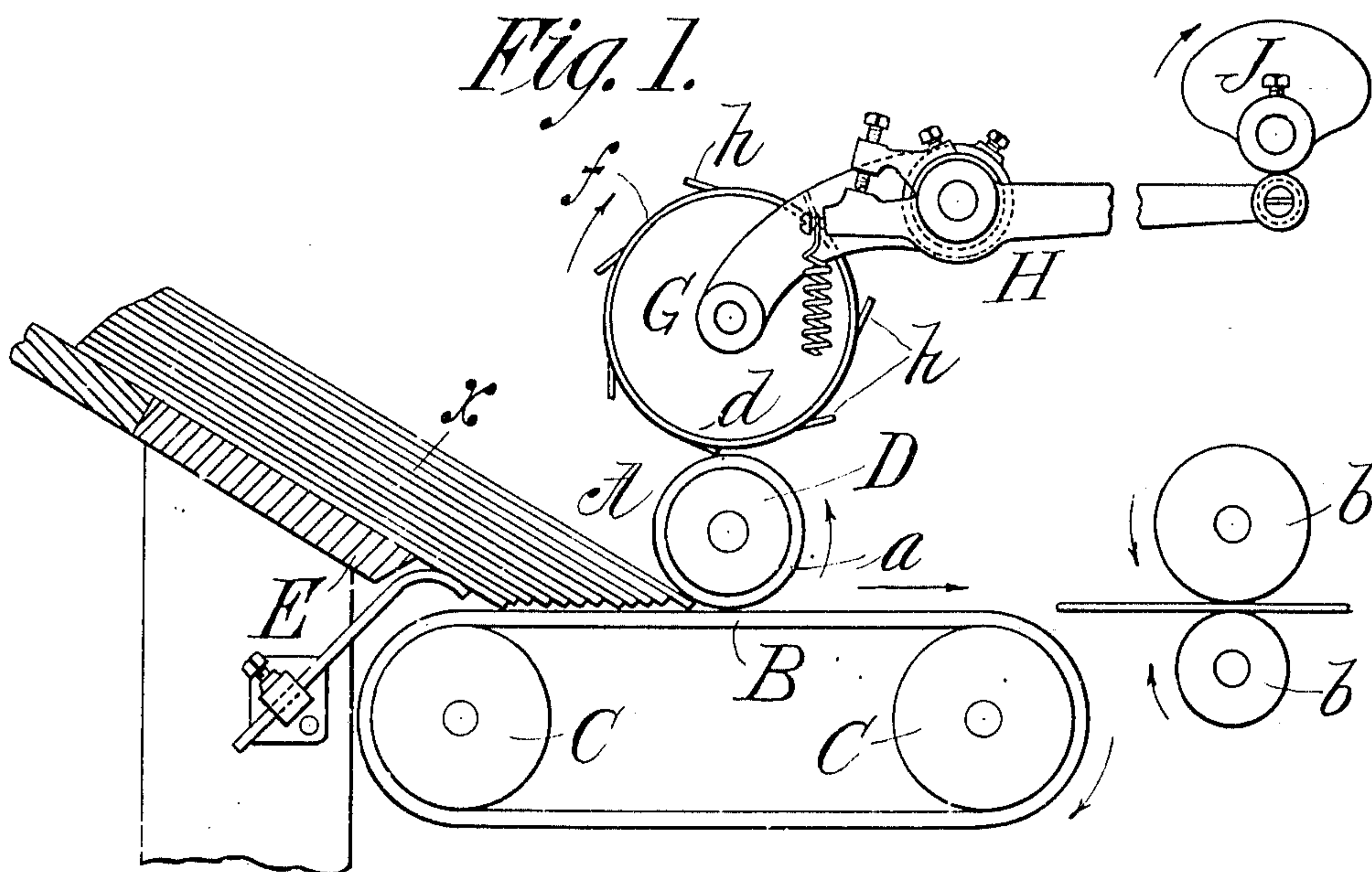


T. W. HEBERT.
PAPER FEEDING MECHANISM.
APPLICATION FILED JUNE 11, 1910.

984,273.

Patented Feb. 14, 1911.



WITNESSES:

H. L. Sprague
R. M. Moray

INVENTOR,
Theophile W. Hebert,
BY *J. E. Bell*
ATTORNEY.

UNITED STATES PATENT OFFICE.

THEOPHILE W. HEBERT, OF WILLIMANSETT, MASSACHUSETTS.

PAPER-FEEDING MECHANISM.

984,273.

Specification of Letters Patent.

Patented Feb. 14, 1911.

Application filed June 11, 1910. Serial No. 566,404.

To all whom it may concern:

Be it known that I, THEOPHILE W. HEBERT, a citizen of the United States of America, and a resident of Willimansett, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Paper-Feeding Mechanisms, of which the following is a full, clear, and exact description.

This invention relates to an appliance to be combined with and for the improvement of a paper feeding mechanism of a kind which comprises a rubber surfaced roller which coacts with a rubber feed belt arranged in relation to a support for a pile of paper sheets and which is operative to advance the sheets one at a time forwardly, for instance to a Harris or other printing press.

As well known, the lint, dust and other particles carried by the paper and being taken up by the rubber surfaced roller and onto the apron impairs the action of the feeder; and moreover the rubber surfaced roller in time becomes glazed and smooth and is of greatly lessened efficiency in the paper feeding operation.

An object of this invention is to provide a roll which is peripherally coöperative with the rubber surfaced roll of the paper feeder which first named roll has a roughened surface which exerts slightly a roughening and freshened condition to the rubber surfaced roll.

Another object of this invention is to include in the roll having the roughening surface a plurality of flaps or wings which in the rotation of such roll comparatively rapidly will produce a wind or air current for blowing away or dissipating lint or small particles of dust or dirt from adjacent the rubber covered roller.

The invention is described in conjunction with the accompanying drawings and is set forth in the claims.

In the drawings:—Figure 1 is substantially a side elevation of a paper feeding mechanism such as commonly employed on a well known Harris printing press and showing the rotary roller which constitutes the essential of the present invention. Fig. 2 is a perspective view of the roll; Fig. 3 is a cross sectional view of the roll.

In the drawings, A represents a feeder for sheets of paper, the same comprising an endless feed apron B of rubber which runs

around the front and rear rolls C C, and the roll D which has a comparatively thick surfacing layer of rubber *a*,—the rubber surfaced roll D and the feed apron, or a plurality of them in side by side arrangement being mounted adjacent the support E for the pile *x* of paper sheets; and the same being operative so that the sheets are one at a time advanced forwardly to the nipping action of the rolls *b b* which deliver them to the printing press.

G represents a roll of novel character, the same being mounted in a rocking support H, the rocking movement of which is imparted thereto by the cam J so that the roll will have, periodically, a peripheral contact with the rubber surfaced roll, being in relatively intermediate periods lifted from such contact. The said roll G consists of a body *d* having a covering *f* of sheet material which in turn has a layer or other surface covering of a comminuted roughening material, the roll covering being advantageously constituted by emery cloth or sand paper.

The emery cloth or sand paper is provided with a plurality of incisions *g g* on lines corresponding to the three sides of a rectangle whereby correspondingly shaped flaps or wings *h h* are produced; and such emery cloth or the like is secured as by gluing to the periphery of the roll body throughout its entire inner surface excepting at the cut out portions at which the flaps or wings are produced.

In the operation of the roll G made as described, the roll by its frequent contactings peripherally on the top of the rubber faced roller D will operate to roughen and freshen the surface of the latter roll; and the roll D which is understood as a constantly driven or power roll by its engagement with the roughened surface of the roll G will cause a rotative movement of the roll G; and such rotative movement will be continued, by momentum, even at times when such roughening roller is elevated above and out of contact with the rubber surfaced one; and the sufficiently swiftly revolving flaps or wings will under centrifugal force be thrown outwardly so that they operate as fans to create a wind or current of air around and about the locality of the roll D for the blowing away of lint, dust and dirt coming from the paper and small particles of grindings as liberated from either of the rolls in the action of the one upon the other.

I claim:—

1. The combination with a rubber surfaced roll of a paper feeding mechanism, of a roll for peripheral engagement with such rubber surfaced roll which has a roughened surface and which is provided with a plurality of flaps for producing an air current in proximity to the rubber surfaced roll.
2. The combination with a rubber surfaced roll of a paper feeding mechanism, of a roller comprising a body, a sheet material inclosing such body having a surfacing of comminuted roughening material, such sheet material being provided with a plurality of incisions whereby flaps or wings are produced which are unsecured to the body.
3. A roller for the purpose described consisting of a body, a covering of sheet material having a layer of comminuted roughening material on its surface, such sheet material being provided with a plurality of incisions whereby wings or flaps are produced, and such sheet material being secured to the periphery of the body excepting at the locations of the said flaps.

Signed by me at Springfield, Mass., in presence of two subscribing witnesses.

THEOPHILE W. HEBERT.

Witnesses:

G. R. DRISCOLL,
WM. S. BELLOWS.