

G. L. WITSIL & T. W. HAWKINS.  
Clothes-Wringers.

No. 151,947.

Patented June 9, 1874.

Fig. 1.

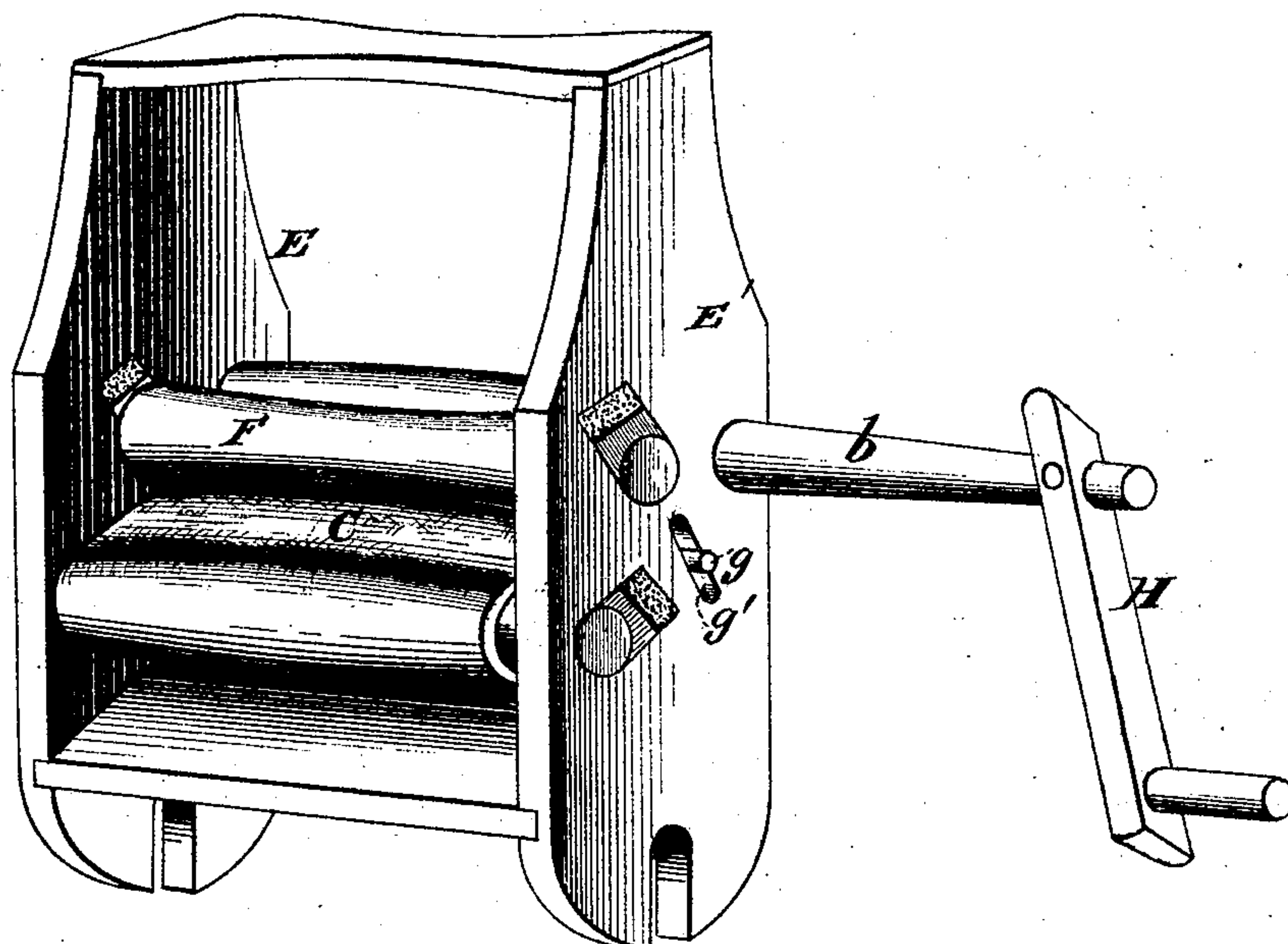


Fig. 2.

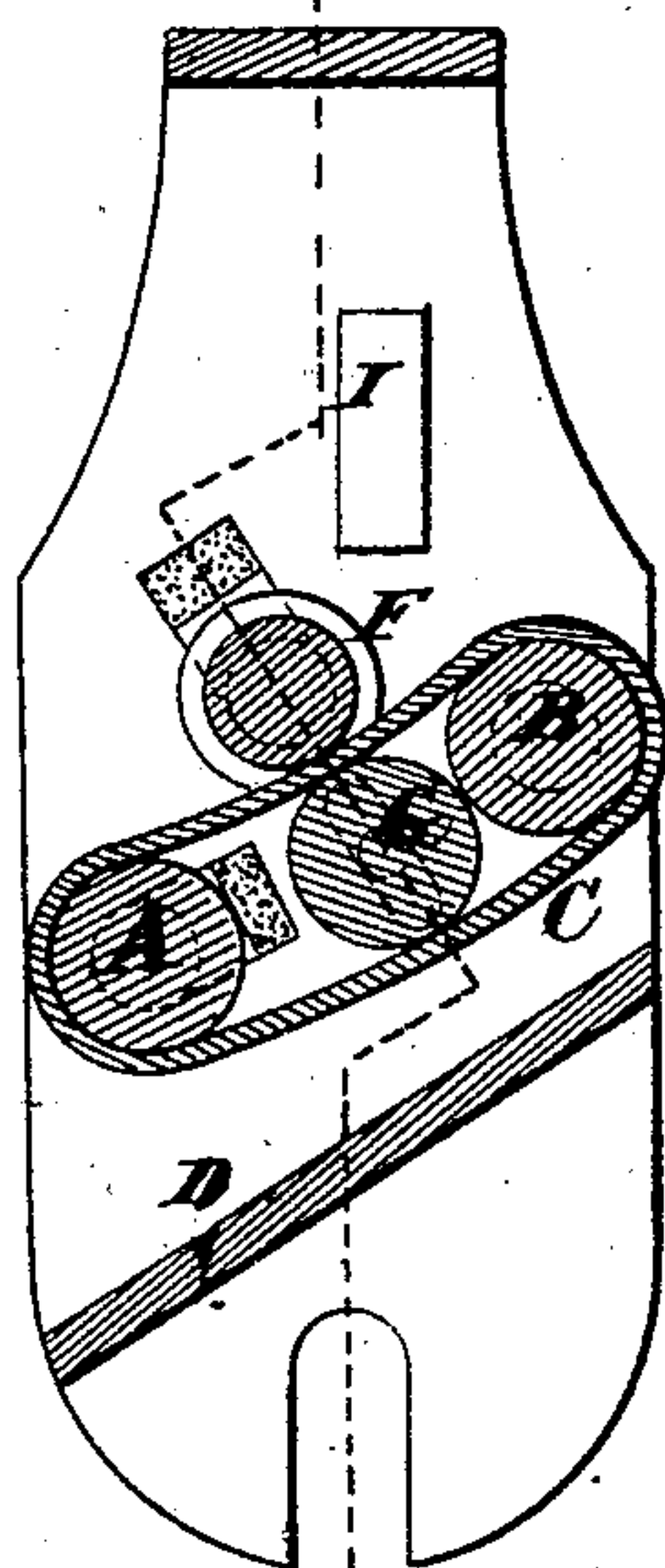
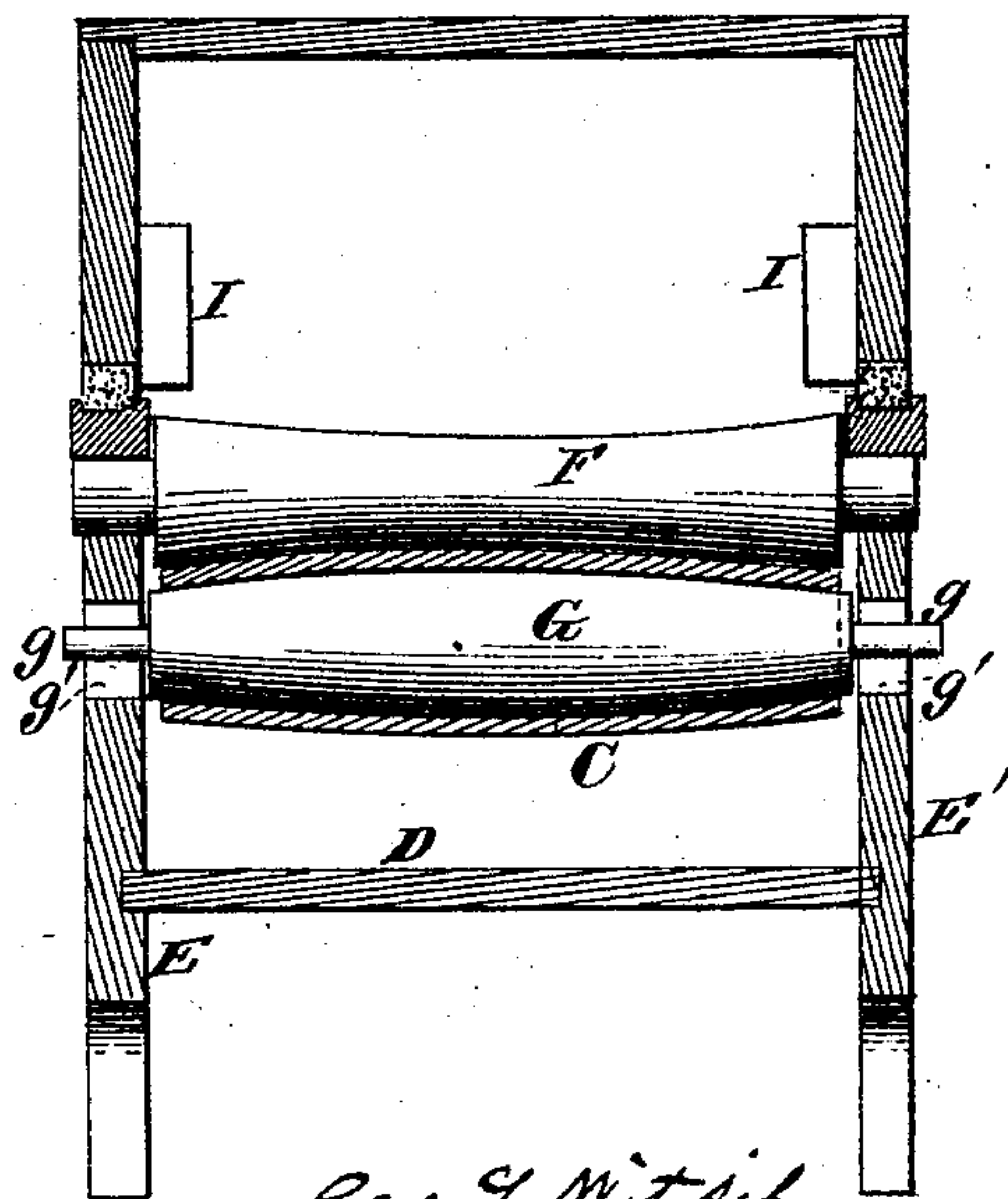


Fig. 3.



Witnesses.  
A. Rupprecht,  
J. J. Eils

Geo. L. Witsil  
T. W. Hawkins  
Inventor.  
D. W. Holloway & Co.  
Atty.



# UNITED STATES PATENT OFFICE.

GEORGE L. WITSIL AND THOMAS W. HAWKINS, OF BEVERLY, N. J.

## IMPROVEMENT IN CLOTHES-WRINGERS.

Specification forming part of Letters Patent No. **151,947**, dated June 9, 1874; application filed April 20, 1874.

*To all whom it may concern:*

Be it known that we, GEORGE L. WITSIL and THOMAS W. HAWKINS, both of Beverly, in the county of Burlington and State of New Jersey, have invented a certain Improvement in Wringing-Machines, of which the following is a specification:

This invention relates to that class of clothes-wringers which consist, in the main, of an endless rubber band or web, between which and an exterior roller the clothes are squeezed to express the water from them. Our improvement consists in placing a loose roller between the endless band under the presser-roller, so that the pressure of the latter will meet with greater resistance from the endless belt, being sustained by both the lower and upper sections thereof, besides affording the additional rigidity of the hard surface of the loose roller itself.

In the annexed drawings, Figure 1 is a perspective view of our improved clothes-wringer. Fig. 2 is a transverse vertical section of the same. Fig. 3 is a vertical longitudinal section thereof.

The same letters of reference are used in all the figures in the designation of identical parts.

The rollers A and B, over which the endless rubber band C is stretched, turn in bearings in the housings E and E', and are so arranged that the endless band will travel in inclined planes, as shown. Underneath the band an inclined board, D, is placed, stretching from one housing or standard to the other, and intended to direct the water expressed from the clothes back into the tub. About midway between the rollers A and B a presser-roller, F, is placed, turning in forcible contact with the upper section of the band, but in yielding boxes, so that it as well as the band may recede as clothes pass through between them. A loose roller, G, is inserted between the endless belt or band directly underneath the presser-roller F, and receiving the pressure of the latter through the upper section of the band trans-

mits it to the lower section thereof. The bearings of the pressure-roller are arranged to yield in a direction perpendicular to a line drawn through the axes of the rollers A and B, and the loose roller G has journals *g* projecting into slots *g'* in the housings, the slots being suitably elongated, so that the roller may yield freely to the action of the presser-roller and the band. The presser-roller F and roller G are preferably so arranged, relatively, that a line drawn through their axes will intersect at right angles a line drawn through the axes of the rollers A and B. We also prefer to make the several rollers A, B, and G somewhat convex longitudinally, and the presser-roller correspondingly concave, as shown in Fig. 3. The journal *b* of the upper roller B extends a suitable distance through its bearing, and is provided with a winch, H, by which the roller is turned and motion imparted to the endless band, which is stretched sufficiently taut to that end. The bearings of the rollers A and B may be provided with means of adjustment, and also with springs to permit them to yield to a limited extent. The housings are slotted at their lower ends, so that they may be placed over the top of a tub, and suitably clamped thereto. Deflectors I may be secured to the housings to direct the clothes downward after having passed through the machine.

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

The combination of the endless band with the presser-roller, and the roller G loosely confined by and between the endless band, substantially as and for the purpose specified.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

GEO. L. WITSIL.  
THOMAS W. HAWKINS.

Witnesses:

D. P. HOLLOWAY,  
THOMAS C. CONNOLLY.