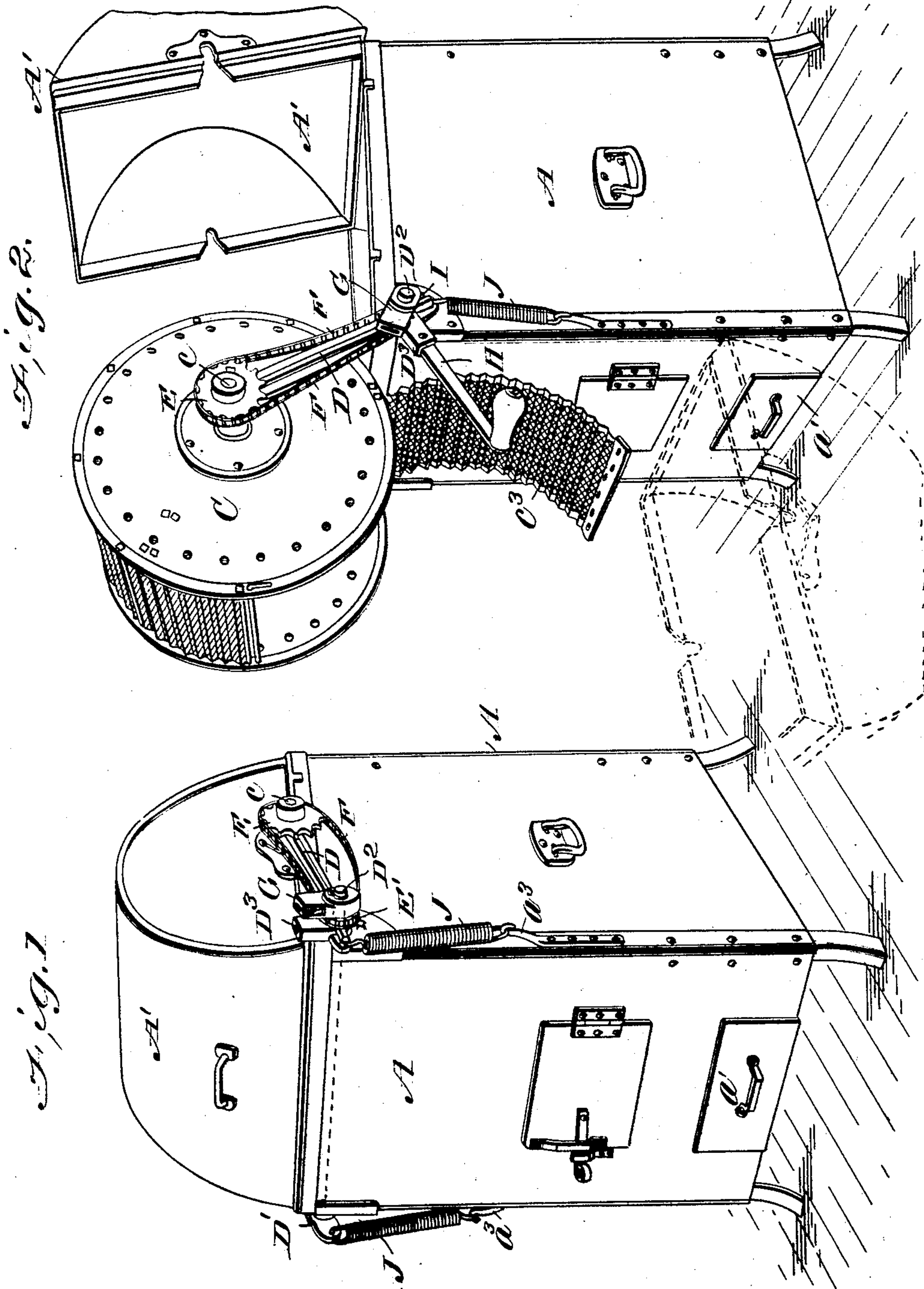


J. W. SEIFERT.  
 WASHING MACHINE.  
 APPLICATION FILED DEC. 28, 1907.

Patented Feb. 9, 1909.

3 SHEETS—SHEET 1.

912,038.



Witnesses  
*H. C. Barry*  
*Amos W. Harris*

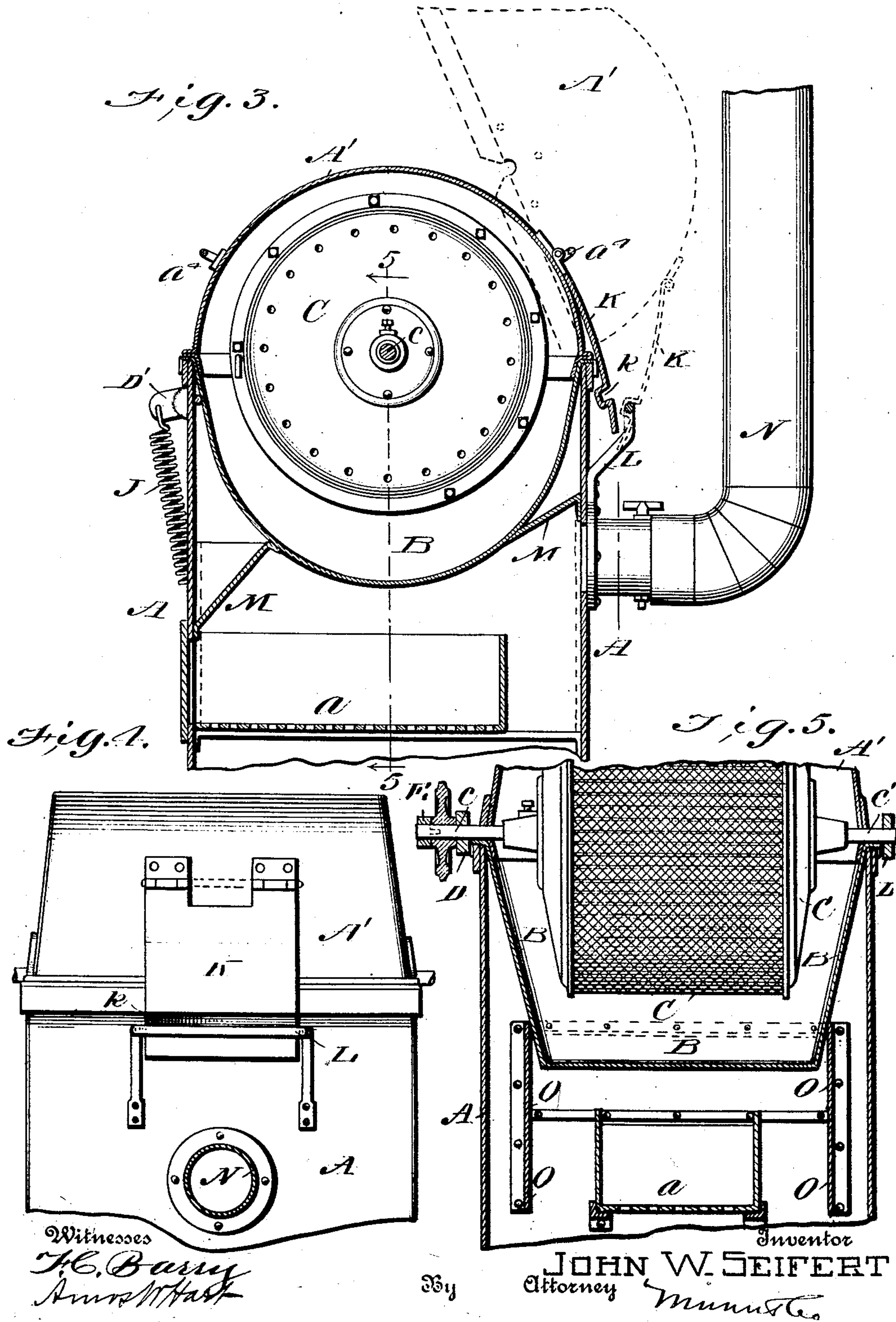
By

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 Attorney *Munn & Co.*

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3 SHEETS—SHEET 2.



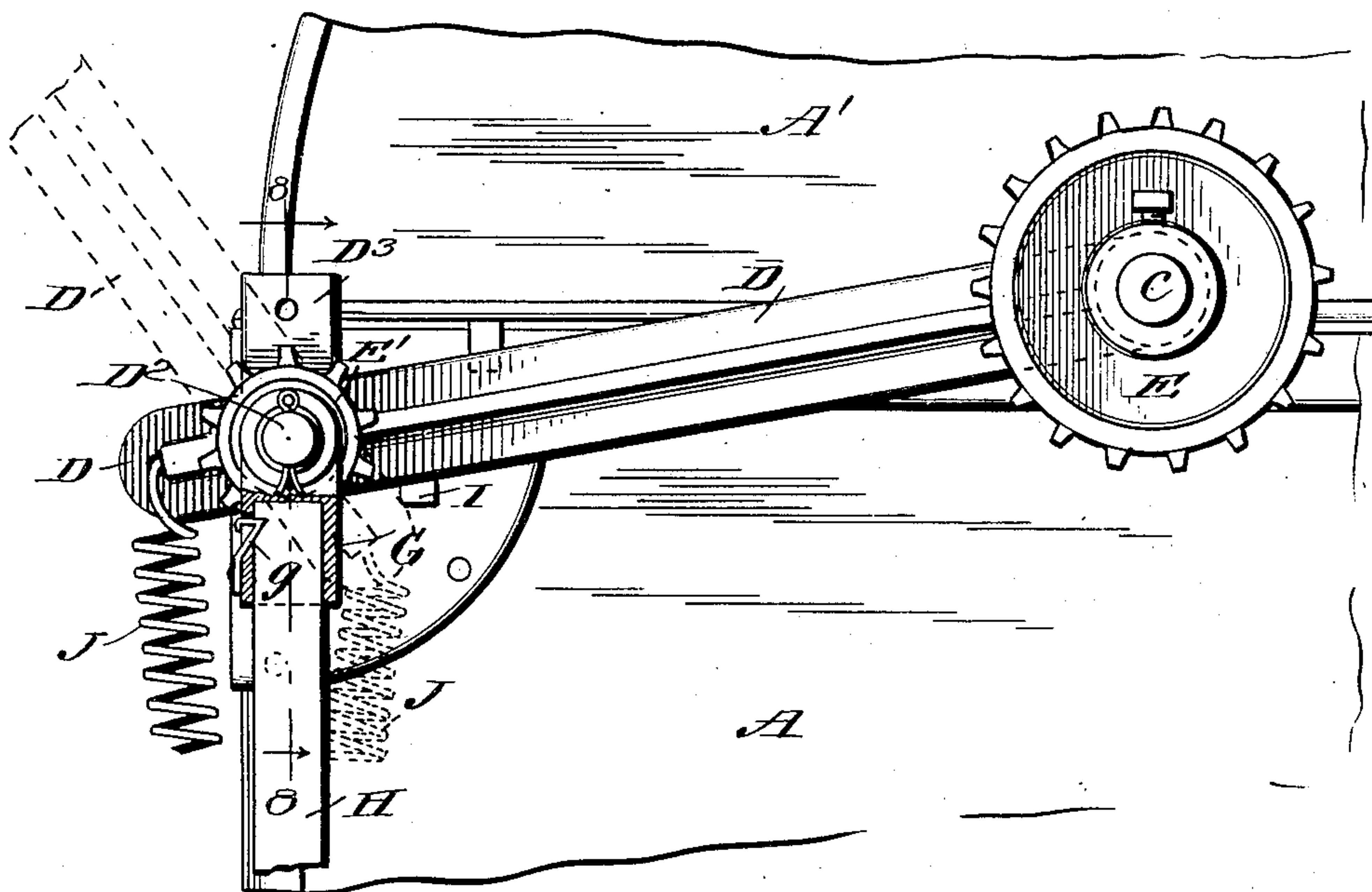


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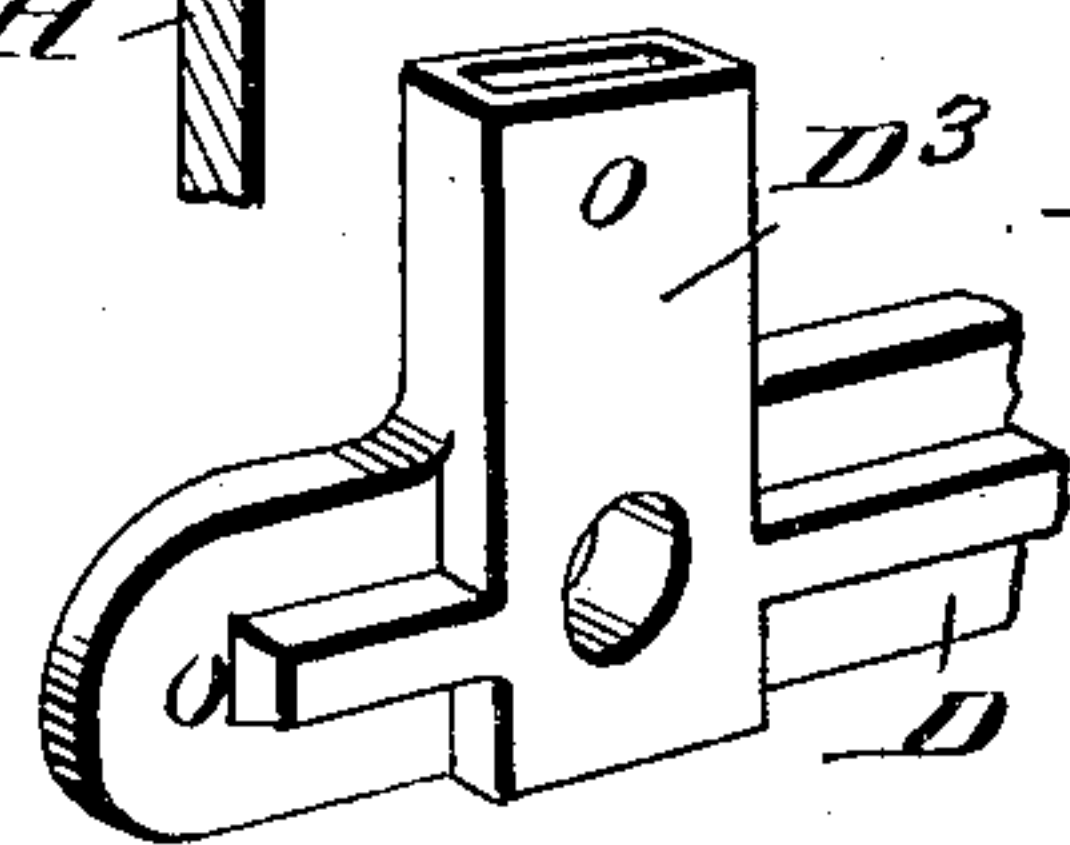
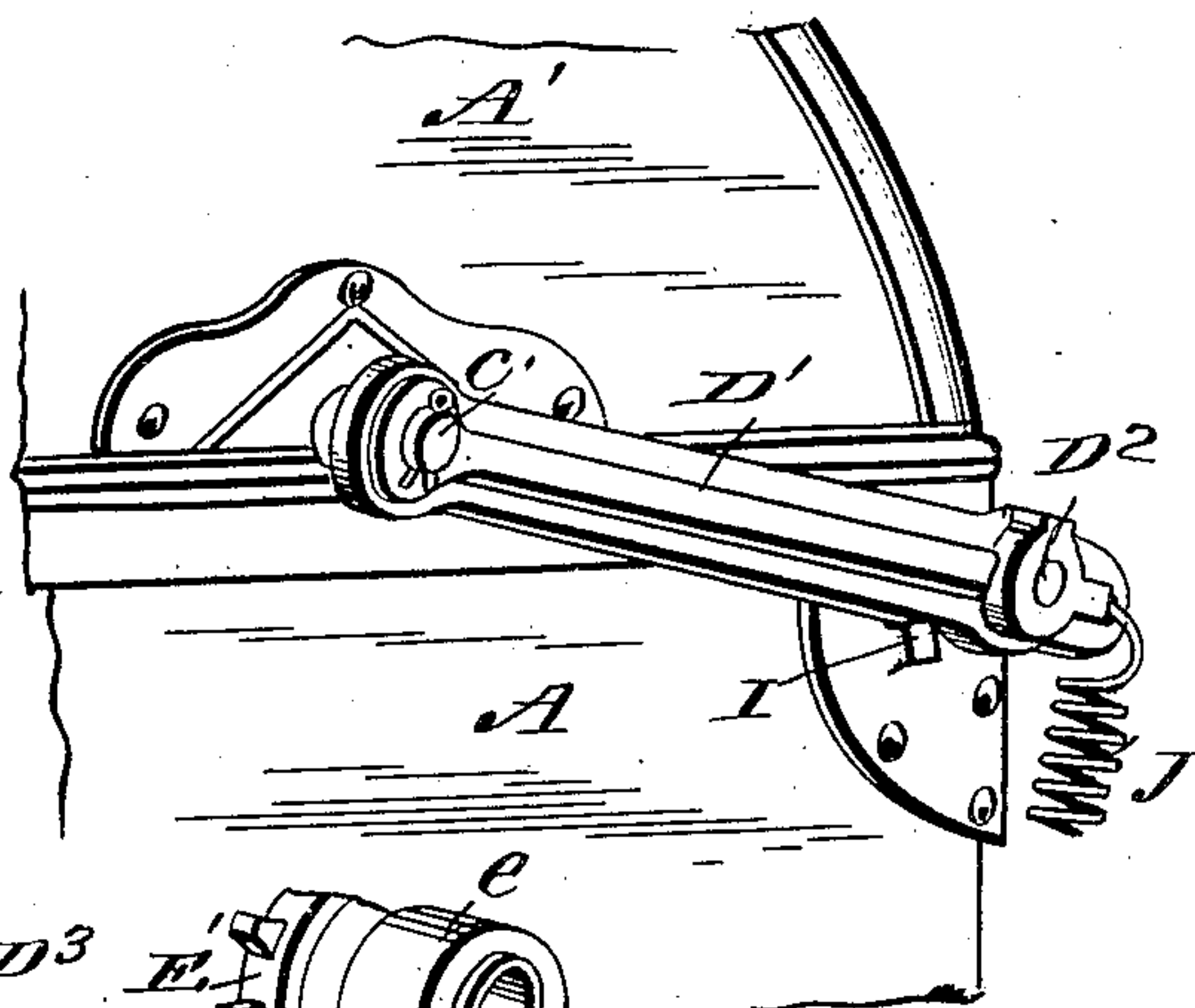
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 3 SHEETS—SHEET 3.

*Fig. 6.*



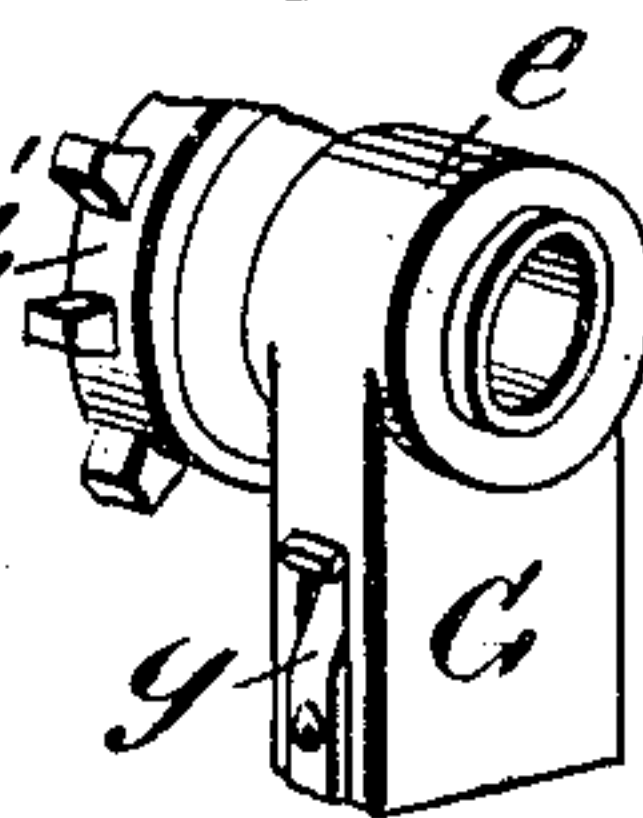
*Fig. 7.*



*Fig. 9.*

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3311



*Fig. 10.*

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# UNITED STATES PATENT OFFICE.

JOHN W. SEIFERT, OF ST. LOUIS, MISSOURI.

## WASHING-MACHINE.

No. 912,038.

Specification of Letters Patent.

Patented Feb. 9, 1909.

Application filed December 28, 1907. Serial No. 408,421.

*To all whom it may concern:*

Be it known that I, JOHN W. SEIFERT, a citizen of the United States, and resident of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification.

My present invention is an improvement in the class of boiler washing machines, and particularly upon the machine forming the subject of my United States Patent, No. 850,061, dated April 9th, 1907, and No. 880,334, dated Feb. 25, 1908.

The details of construction, arrangement, and combination of parts embodying the invention are hereinafter described, and illustrated in the accompanying drawings in which—

Figure 1 is a perspective view of the machine. Fig. 2 is a perspective view showing the cover thrown back and the clothes-drum in the position to which it is raised, or elevated, when it is required to discharge clothes therefrom. Fig. 3 is a vertical section of the machine, the clothes-drum being shown in end view. Fig. 4 is a rear view of the upper portion of the machine. Fig. 5 is a vertical section on the line 5—5 of Fig. 3. Fig. 6 is an enlarged side view of a portion of the machine, particularly the levers and gearing by which the clothes-drum is operated and raised to an elevated position, the handle socket being shown in section. Fig. 7 is a reduced perspective view of the side of the machine opposite that shown in Fig. 6. Fig. 8 is a vertical section on the line 8—8 of Fig. 6. Fig. 9 is a perspective view of the pivot end of one of the levers in which the clothes-drum is journaled. Fig. 10 is a perspective view of the handle socket and the sprocket wheel attached thereto.

The body A of the machine is constructed of sheet metal and rectangular in form. Within the body is arranged a fuel grate *a* and below it is an ash pan *a'*. Above the grate is a kettle, or boiler proper, B, whose upper edge is constructed with flanges or hooks adapted to rest upon the top edge of the body A.

A' is a semi-circular cover whose lower portion is square and provided with an internal flange adapted to enter the upper edge of the kettle B, as shown in Fig. 3. In the space inclosed between the kettle B and the cover A' is arranged a cylindrical clothes-

drum C, the same being provided with trunnions *c*, *c'*, that constitute journals in the ends of the longer arms of levers D, D', arranged parallel on opposite sides of the machine and journaled, or pivoted, on a shaft D<sup>2</sup> that passes through the upper front corners of the body A. A sprocket wheel E is clamped on the trunnion *c* of the clothes-drum and a chain F runs thereon and on a small sprocket E', which, as shown in Figs. 8 and 10, is formed integral, with or rigidly connected, with a sleeve *e* having a handle-socket G cast integral therewith. These parts, E' and *e*, are adapted to revolve loosely on the shaft D<sup>2</sup>.

The handle H is held detachably in the socket G by means of a spring catch *g*—see Figs. 6 and 10. It is apparent that, by inserting the handle H in the socket G and rotating the same, the small sprocket wheel E' will be rotated also, and thereby, through the chain F, like motion will be imparted to the sprocket wheel E and the clothes-drum C so that the latter will be caused to rotate in the hot water in the boiler B. The proportion between sprocket wheels E and E' is preferably such that three revolutions of the wheel E' are required to produce one revolution of the wheel E, so that the travel of the clothes-drum is comparatively slow.

When it is desired to remove the clothes from the drum, the handle H is removed from the socket G and inserted in the same way in a socket D<sup>3</sup>, which is formed integral with, and as a lateral projection on the upper side of, the lever D, at a point directly opposite the pivot shaft D<sup>2</sup>. Then, by using the handle H as a lever, and forcing it outwardly and downwardly to the position indicated in Fig. 2, the clothes-drum will be raised out of the boiler or kettle and will overhang the front edge of the boiler and the body A, so that the clothes will discharge through the opening and will be guided in their descent by the curved door *c*<sup>3</sup> into a receptacle, which, as indicated by dotted lines, Fig. 2, may be the inverted cover A' of the machine. In order to arrest and hold the clothes-drum C in the elevated position referred to, it is necessary to provide a stop and this is formed by means of lugs I arranged as lateral projections of brackets attached to the upper front corners of the body A, in such position that they will engage the shorter arms of the levers D, D', when they have swung upward and forward to



the proper angle, as indicated by dotted lines, Fig. 6 and full lines Fig. 2. The said lugs are also located in the right position for contact with, and arrest of, the levers 5 D, D', when the drum is lowered into the kettle B. Spiral springs J—see Figs. 1, 2, and 3—are connected with the shorter arms of the levers D, D', and with hooks  $a^3$  secured to the body A. These springs are of 10 such length that when the drum C is in either of its two positions, the springs are under tension, or stretched. This tension is not sufficient to exactly balance the weight of the empty drum and its attachments, but it 15 is sufficient to prevent the levers D, D', from striking heavily on the stops I when the loaded drum is lowered into the kettle or when raised to the elevated position; and they assist materially in raising the loaded 20 drum out of the kettle. Hence, in consequence of the attachment and tension of the springs J, the loaded drum C may be raised and lowered much more quickly than would be otherwise practicable.

25 In Fig. 2 the full lines show the cover A supported in a nearly vertical position, and dotted lines Fig. 3 also illustrate the same. The means for supporting it in this position are indicated in Figs. 3 and 4, and consist of 30 a plate K hinged to the cover  $a^4$  and provided near its lower end with a recess, or groove,  $k$ . A form of support L adapted to engage the notch, or groove,  $k$  of plate K is attached to the side of the body A and its upper end projects laterally as shown. When the cover A' 35 is raised and thrown back, the plate K and the support L engage, as shown by dotted lines Fig. 3, the cover being thus supported in a position slightly inclined from the vertical. 40 When the cover is drawn forward and downward, the hinged plate drops back and

automatically disengages itself from the support L. Thus the engagement and disengagement are both automatic, it being only necessary to raise the cover or lower the same 45 in order to effect these operations.

Within the body A and on opposite sides of the bottom of the kettle B, I arrange guard plates M, M', which prevent access of 50 flame and heated gases to the upper portions of the kettle and direct them toward the exit where the pipe N is attached to the body A. As shown in Fig. 5, vertical guard plates O are arranged on opposite sides of the grate 55  $a$  to direct the flame and heated gases upon the bottom proper of the kettle, rather than permit them free access to the upper portion of the kettle.

It will be seen that the several guards prevent direct access of flame and heated gases 60 to the upper portion of the body A and practically confine them to the space above the grate which is covered by the bottom of the kettle B.

I claim: 65

The combination with the body of the machine, and a kettle supported therein, of a reticulated closed drum, parallel levers in which said drum is journaled, a shaft the 70 ends of which extend from the body at the front upper corners of the same, to serve as the pivots of the levers, a sprocket wheel fixed on one of the drum pivots, another sprocket wheel mounted loose on one of the 75 lever pivots and provided with a rigid handle socket, and a chain applied to and connecting the two sprocket wheels, as shown and described.

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Witnesses:

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