

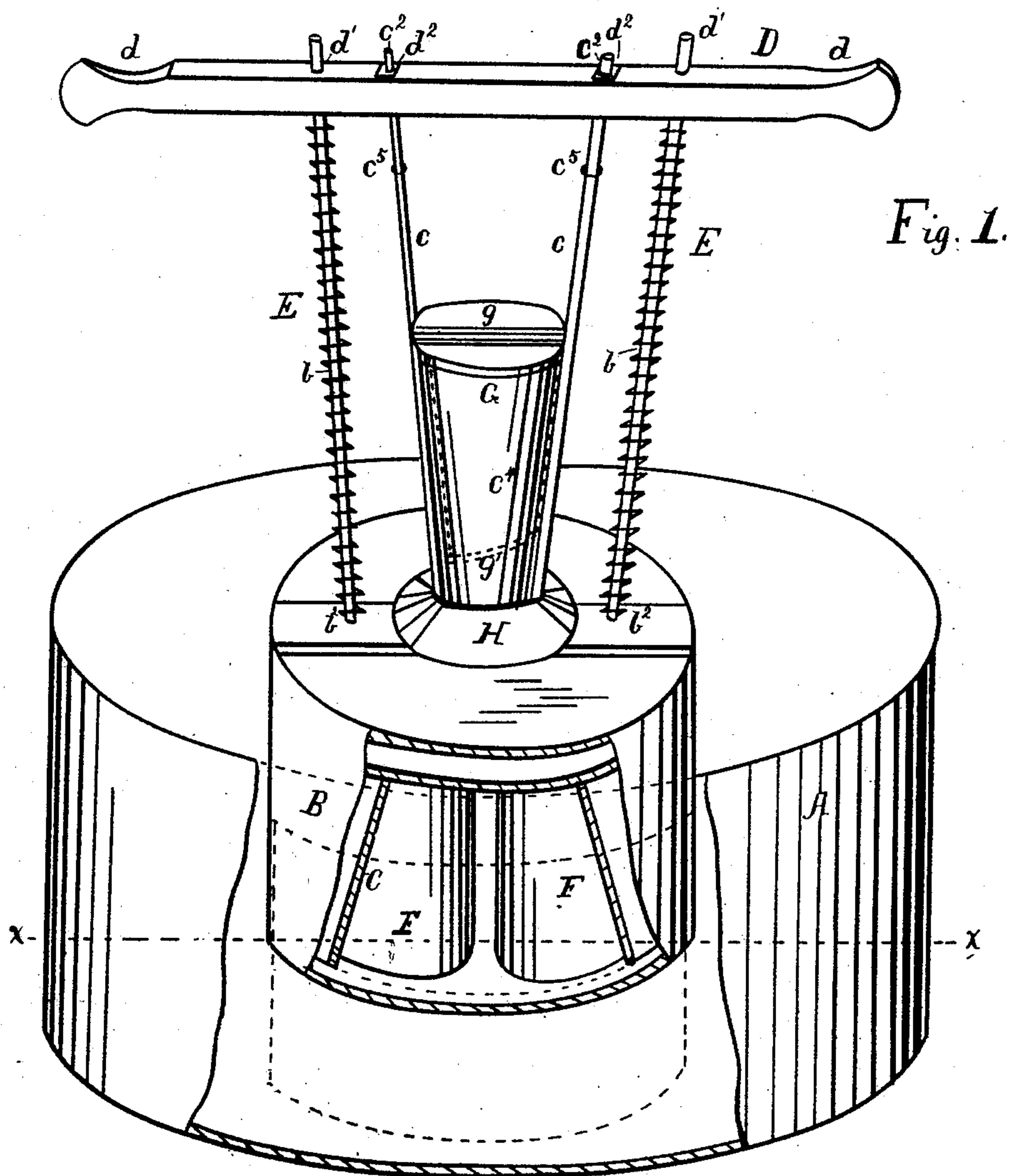
(Model.)

3 Sheets—Sheet 1.

J. R. VESTAL.
WASHING MACHINE.

No. 328,091.

Patented Oct. 13, 1885.



Witnesses

G. A. Haseltine.
C. W. Thrasher

Inventor

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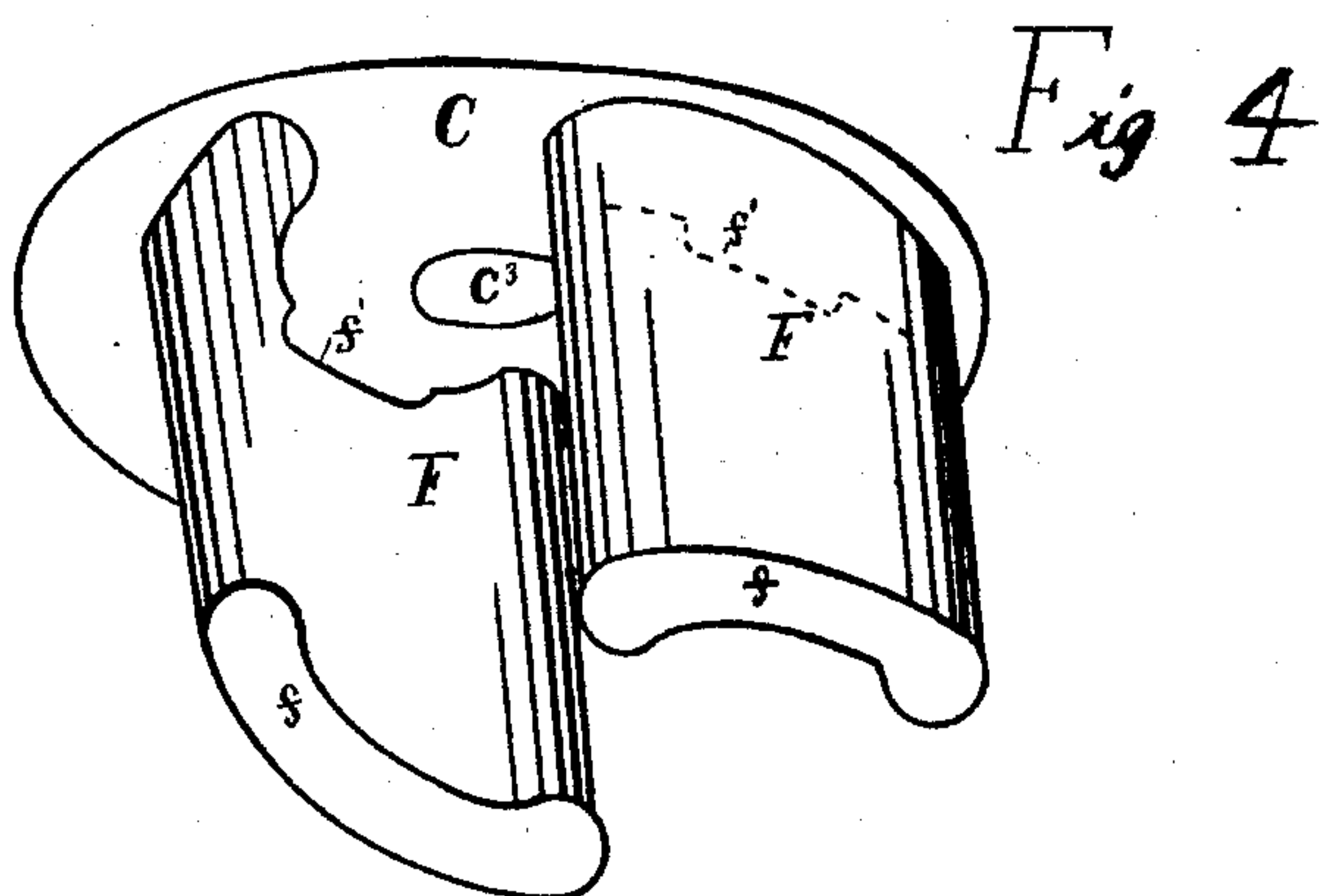
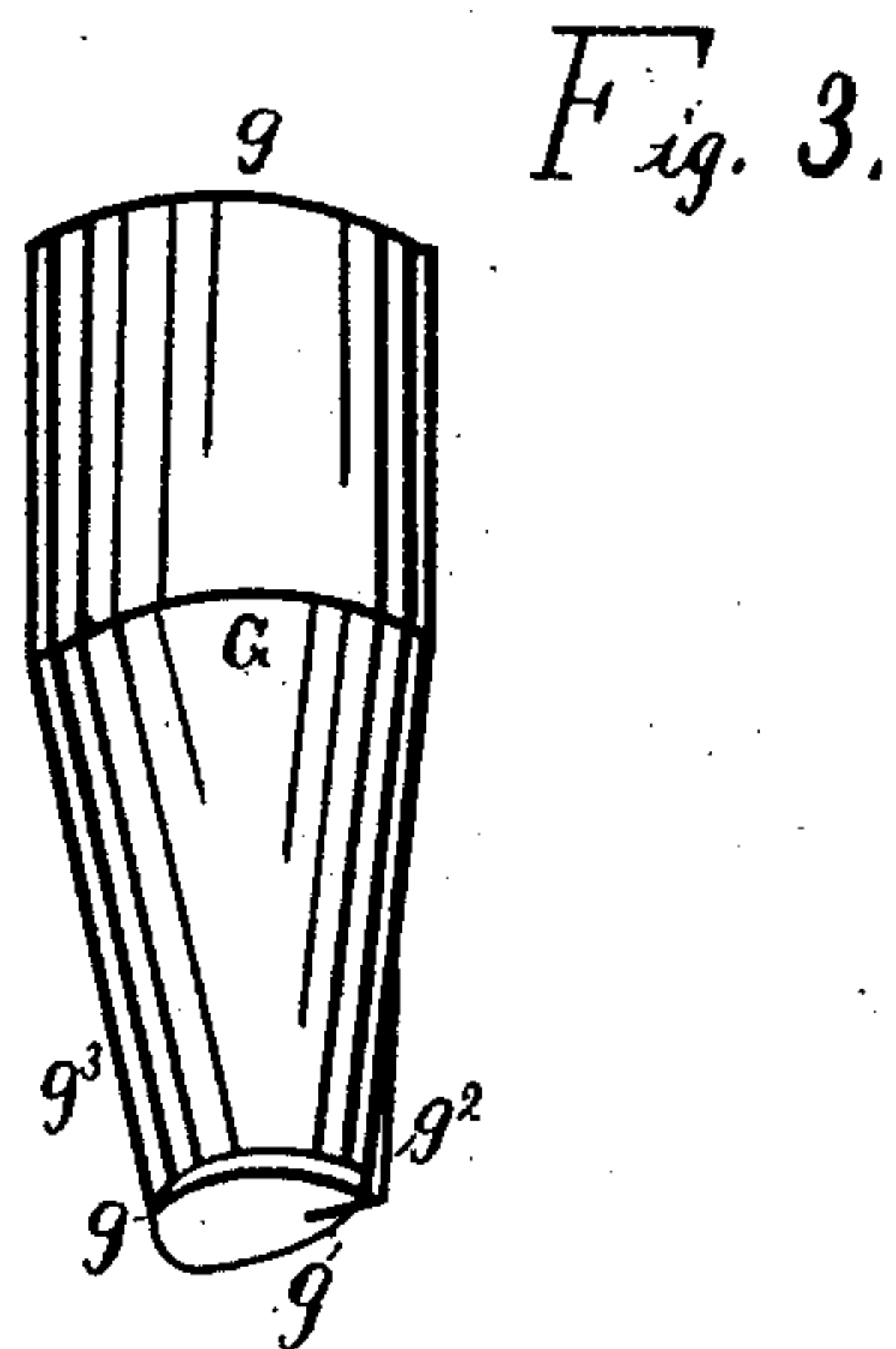
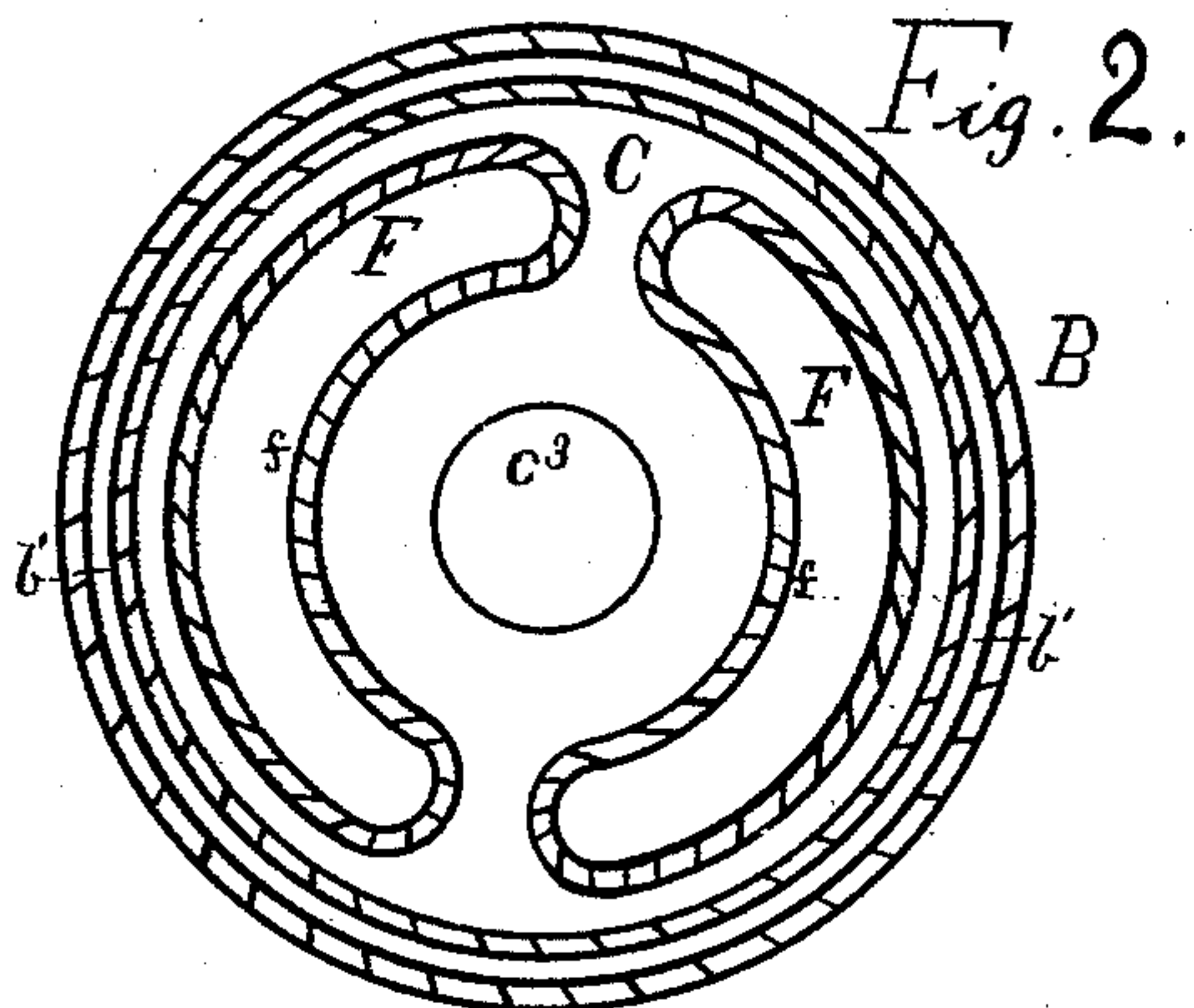
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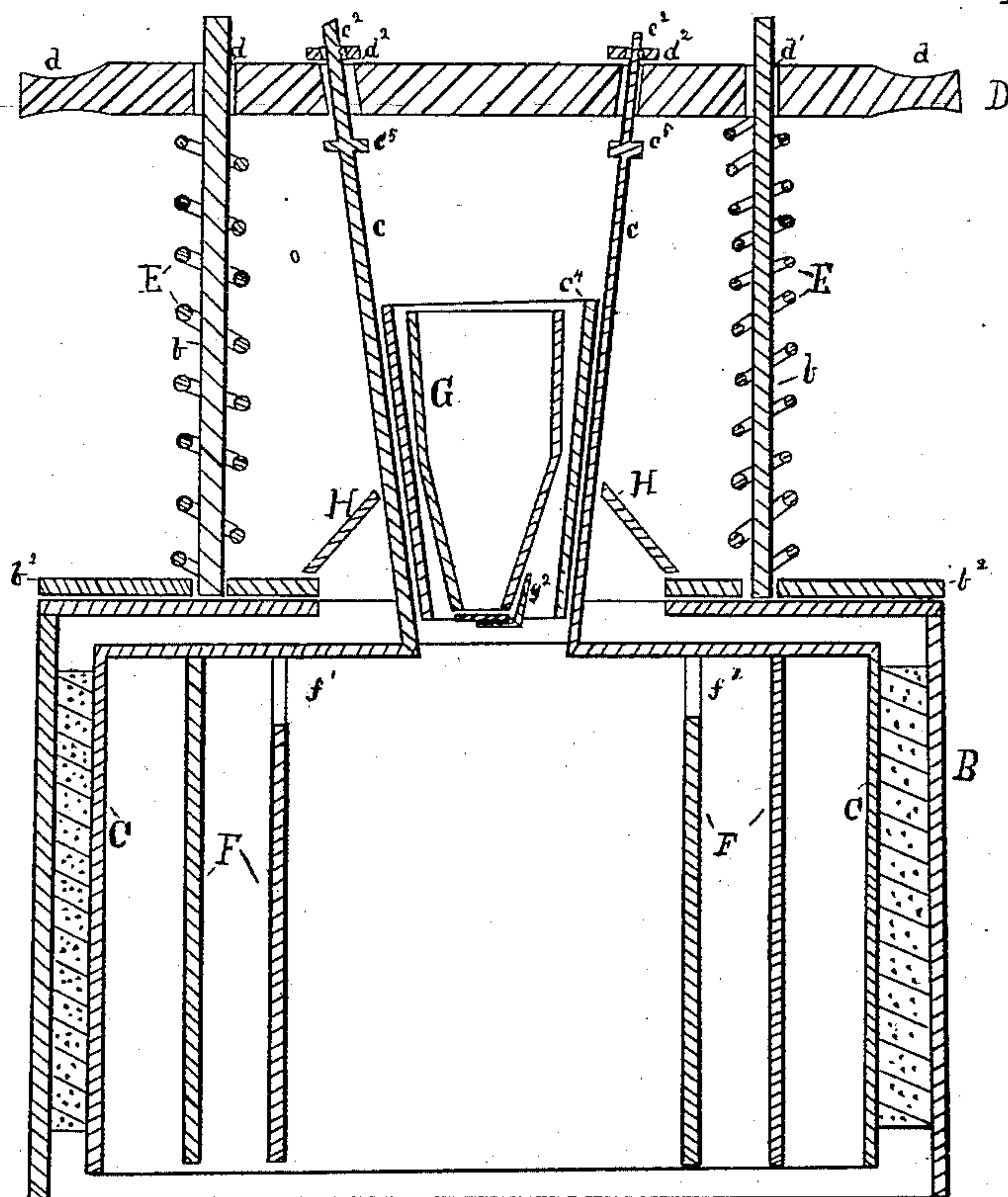
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Fig. 5.



Witnesses.

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UNITED STATES PATENT OFFICE.

JAMES R. VESTAL, OF CAVE SPRING, MISSOURI.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 328,091, dated October 13, 1885.

Application filed May 29, 1884. Serial No. 133,249. (Model.)

To all whom it may concern:

Be it known that I, JAMES R. VESTAL, a citizen of the United States, residing at Cave Spring, in the county of Greene and State of Missouri, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in washing-machines, the object of which is to provide an improved device for quickly and thoroughly washing clothes without wearing them. These objects I attain by means of the device illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a view in elevation showing the device, a part being broken away to show the interior. Fig. 2 is a sectional view on the line *xx* of Fig. 1. Fig. 3 is a view of the tube having the valve, and Fig. 4 is a detail of the cups in the pounder. Fig. 5 is a vertical sectional view of the device.

Like letters of reference indicate similar parts in all the figures.

A is an ordinary tub, boiler, or vessel.

B is a pounder, made of tin or other suitable material and of any desired size and shape. It is preferably made cylindrical, having the lower end open, and in the upper end is made a hole to receive a hollow piston rod or tube, *c*¹. Across this plunger is placed a support, *b*², and to or through it are rigidly attached uprights *b b*, on which are placed spiral springs *E E*. The said uprights pass through a handle, *D*, which has holes *d' d'* to receive them.

C is a hollow piston, made about one-third shorter than and working inside of the pounder B. It is made to fit loosely, and between it and the plunger is put cloth, cotton, or other packing. On the inside of this piston are cups *F F*, which have openings *f' f'* at the top, and into the said piston opens an open tubular piston-rod, *c*², connected to the piston at *c*³. In this tube *c*² is placed a valve, *g'*, which opens downward. This valve is preferably secured in or to the small end of a funnel-shaped tube, *G*, by means of a suitable spring or hinge, *g*², said tube *G* being placed

with the small end down in the top of the tube *c*⁴. Rods *c c*, attached to the tube *c*⁴, are secured to and through the handle *D* by means of holes *d*² *d*² in the handle, and shoulders *c*⁵ *c*⁵ and nuts *c*² *c*² on the rods.

H is a shield concave on the under side and placed upon the piston-tube *c*⁴.

The device is used and operated thus: The clothes to be washed, being placed in the boiler, tub, or other vessel, are covered with water. The operator then clasps the ends *d d* of the handle and moves the pounder down against the clothes. This not only stirs the water and clothes, but at the same time the piston moves down, and drives both air and water through the clothes, and removes the particles of dirt. As the force or pressure is taken from the handle the springs *E E* recoil and throw the piston *C* back into the pounder, and in so doing force the air down through the valve *g'* into the piston. The operator again presses down upon the handle, which forces the piston down against the clothes, and the water and air in the plunger are driven through the clothes.

The pounder may be moved from place to place in the vessel as desired, and thus thoroughly and quickly wash and reach all the clothes in the vessel.

The holes *f' f'* permit the air to enter the cups *F F*, which thoroughly distributes the air in the piston, and causes all the clothes covered by the pounder to be washed at the same time, and this is done without wearing the clothes by either the action of the plunger or piston.

The shield *H* turns back into the vessel any water that might escape between the plunger and piston. The packing between the pounder and piston prevents the water from flying up, and also prevents the wearing of the metals and consequent corroding as the tin or plating wears off. It also prevents catching of the clothes being washed.

The uprights *b b*, which support the springs *E E*, guide the handle *D*, and give a steady perpendicular motion to the piston-rod *c*².

Having thus described the construction, use, and operation of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An improved washing-machine com-

posed of a pounder, B, having uprights $b\ b$, springs E E, a handle, D, to which are attached rods $c\ c$, supporting a hollow piston-rod, c^4 , in which is placed a valve, g' , a shield, H, and piston C, having cups F F, provided with holes $f' f'$, substantially as shown and described.

2. A hollow pounder, B, having uprights $b\ b$, and a support, b^2 , combined with a handle, D, having holes $d' d' d^2 d^2$, and a hollow piston having a hollow piston-rod, c^4 , in which is a valve, g' , and rods $c\ c$, having shoulders

$c^5\ c^5$ and nuts $c^2\ c^2$, substantially as shown and described.

3. A funnel-shaped tube, G, having a valve, g' , combined with a hollow piston-rod, c^4 , and the piston C, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES R. VESTAL.

Witnesses:

S. I. HASELTINE,

S. A. HASELTINE.