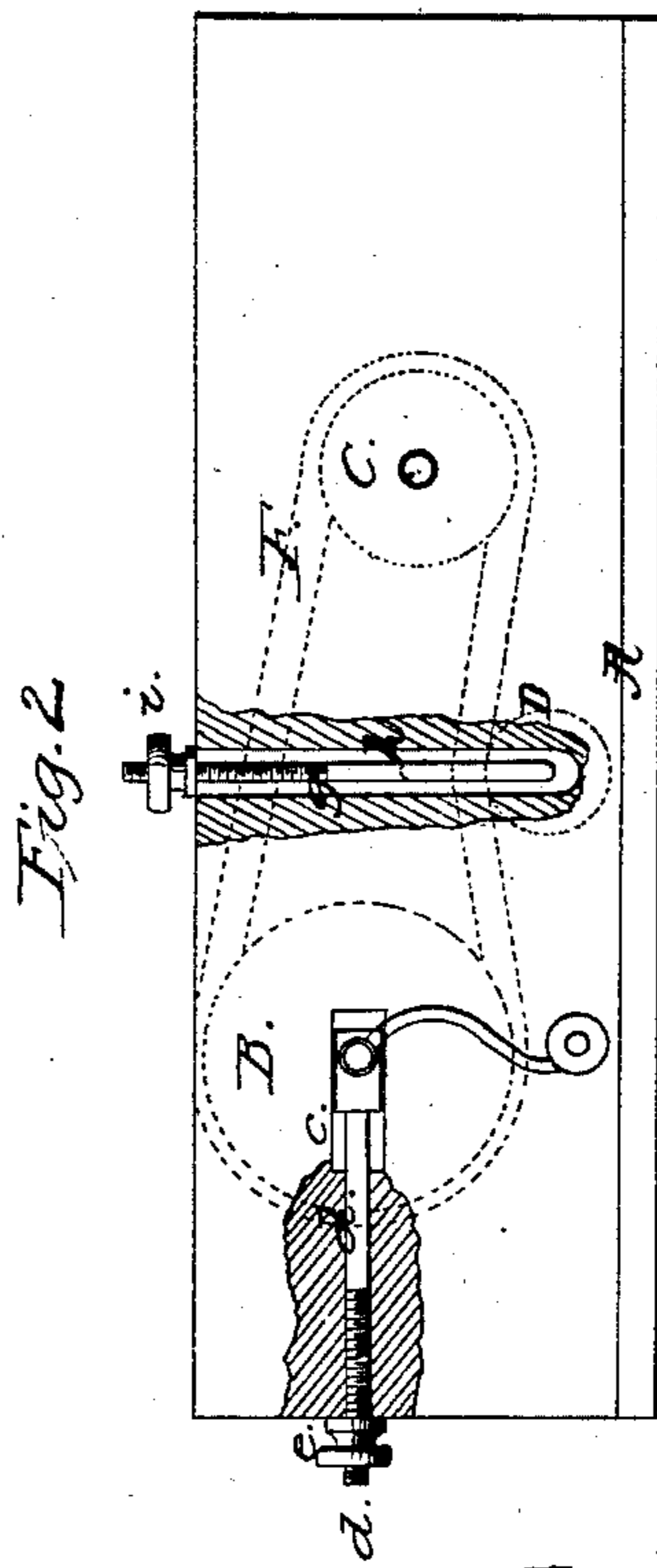
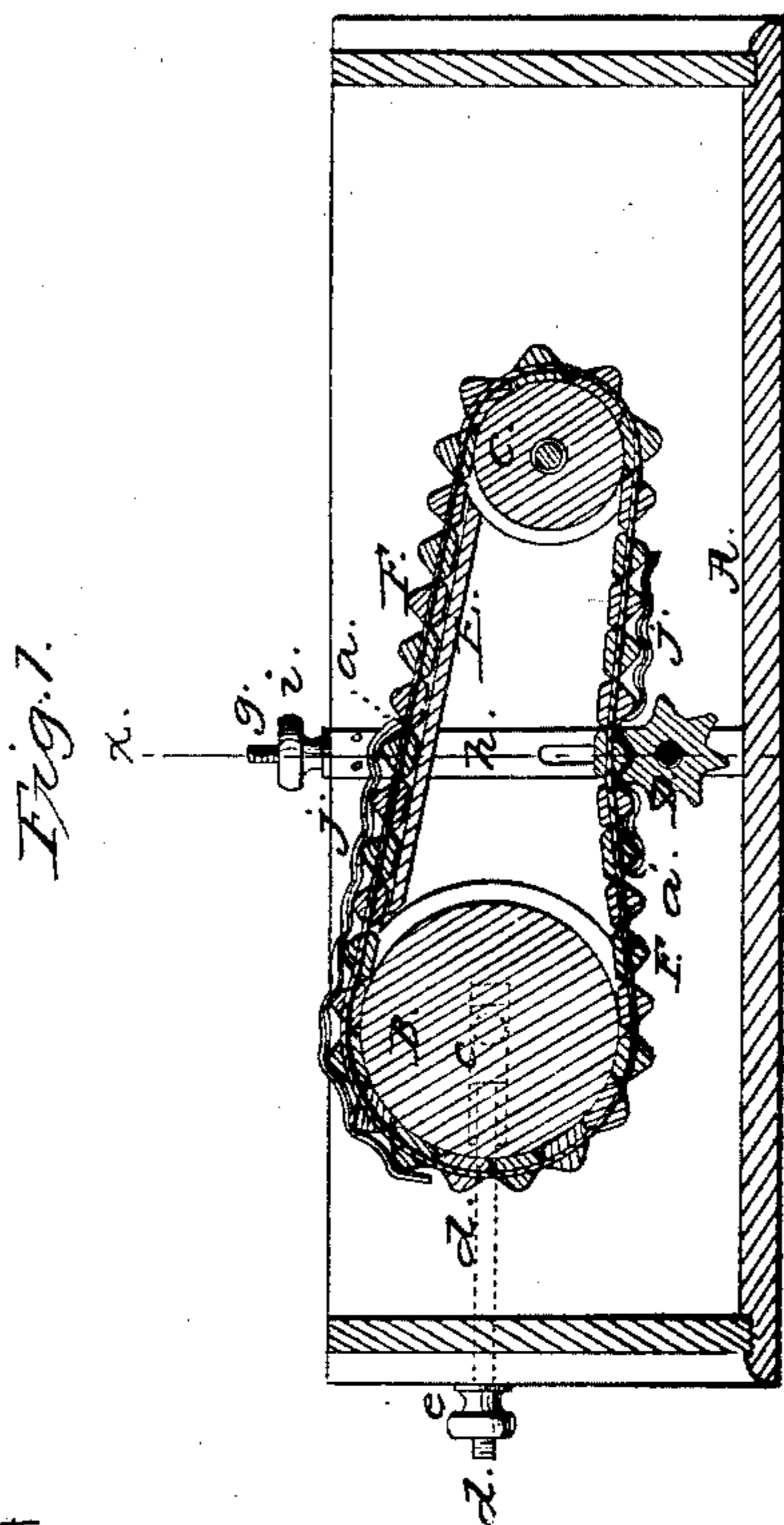
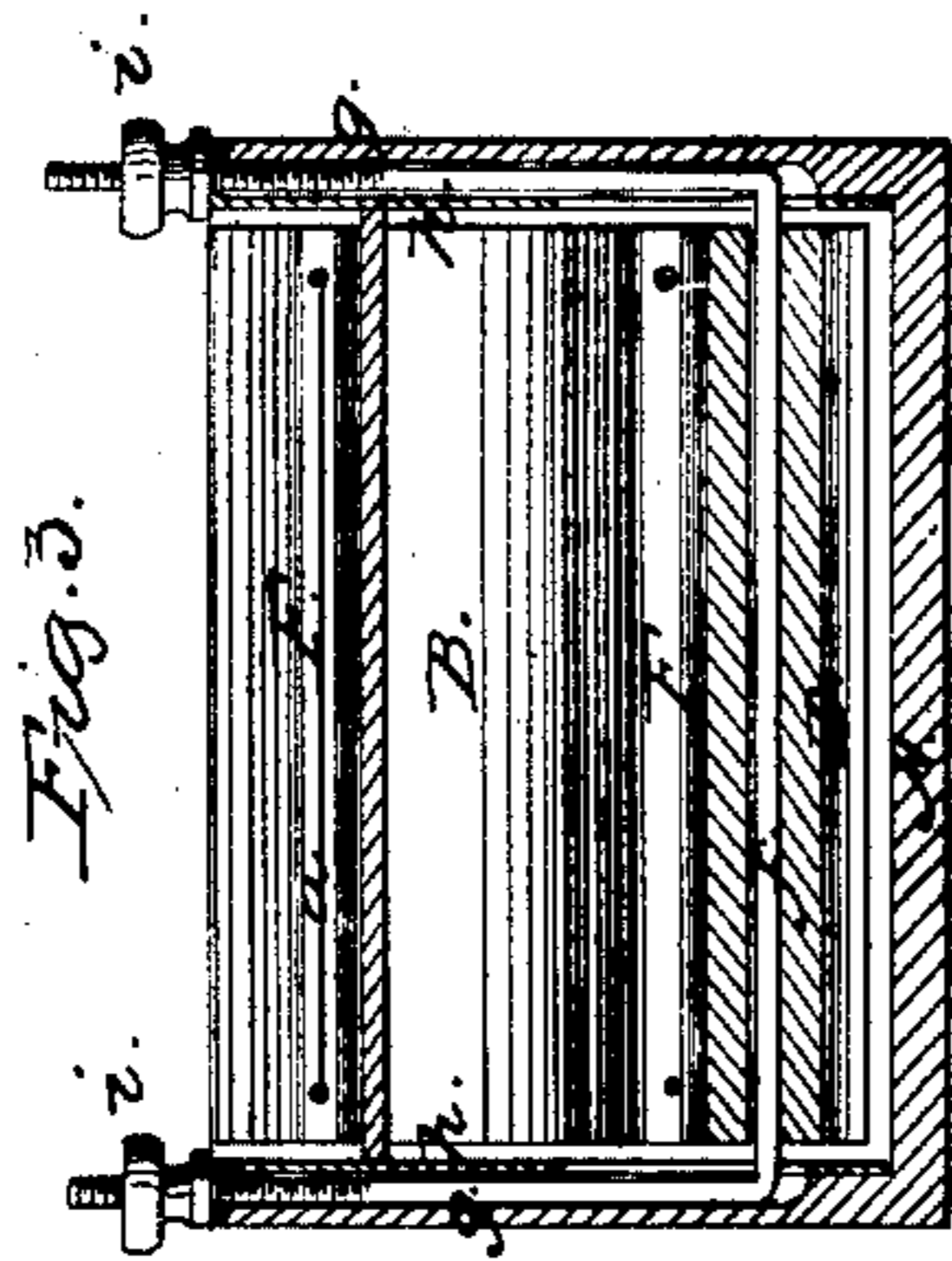


A. G. Wilkins,

Washing Machine,

N^o 35,166.

Patented May 6, 1862.



Witnesses:
Gustavus Dittmer
E. F. Jacob.

Inventor:
A. G. Wilkins.
by J. Fenwick &
Lawrence. Attorneys.

UNITED STATES PATENT OFFICE.

A. G. WILKINS, OF COOPERSTOWN, PENNSYLVANIA.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. **35,166**, dated May 6, 1862.

To all whom it may concern:

Be it known that I, A. G. WILKINS, of Cooperstown, in the county of Venango and State of Pennsylvania, have invented a new and useful Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical longitudinal section of my improved machine. Fig. 2 is a partial section and side elevation of the same. Fig. 3 is a vertical transverse section of the same.

Similar letters of reference in each of the several figures indicate corresponding parts.

My improvements relate to an arrangement of a large and small roller, inclined slatted apron, clothes-confining cords, a stationary platform, fluted pressing-roller, angular adjusting-bar, slotted guides, and horizontal adjusting-screws, in combination with a wash-tub. By means of this combination and arrangement a good practical washing-machine is produced and facilities for using the slatted apron as a hand wash-board for light and delicate parts or articles afforded.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A is a wash box or tub of rectangular or other appropriate form to contain the washing mechanism.

B C D are three rollers arranged within the tub in proper relation to each other and some distance from the ends of the tub.

E is a platform arranged incliningly between the rollers B C and nearly level with the top thereof, so as to form, as it were, a continuation of the rollers, and thus fill or close the space between them to a very slight depth. Beneath this platform, between the rollers, an open space exists.

F is an endless apron or carrier formed of three-cornered slats and arranged around the rollers B C, over the platform E, and in contact with the roller D. This apron is hung incliningly and revolves by frictional contact with the rollers B C and by gearing contact with the roller D. Between several pairs of the slats of the carrier cords *a a* are arranged

at right angles to the motion of the carrier, so as to confine the clothes which are to be washed.

The roller B is made of a much greater diameter than the roller C, in order that the carrier shall be depressed at its front end, and thus incline from its rear to its front end; also, that the front end shall be deeply immersed in water, and, likewise, that it shall have greater speed at the point where the clothes are reversed in position and subjected to the body of water or suds, the increased speed causing greater agitation and more thorough separation of the dirt from the clothes than a speed produced by a front-end roller of same diameter as the back-end roller.

The roller C is hung on a revolving shaft, which has no chance to play in its bearings longitudinally. The roller B has its shaft hung in sliding blocks, which have a chance to move longitudinally in rectangular slots *c*. To the blocks screw-rods *d d* are attached, and on the screw end of the rods clamp-adjusting nuts *e e* are fitted.

The shaft *f* of the roller D terminates in two vertical arms, *g g*, with screw-threads on their termini. These arms are fitted to recesses on the inner side of the tub and confined in place by slotted guide-plates *h h*, as shown. Clamp-adjusting nuts *i i* are fitted to the screw ends of the arms.

To operate with my machine, the slatted belt is made taut by drawing up the screw-rods *d d*, with the nuts *e e*, and the clothes *j* inserted under the cords *a a*, as illustrated. The large roller B is now set in motion by the crank, and the slatted carrier, through its frictional contact, caused to carry the clothes down on an incline into the body of suds, and then under the roller B and between its own slats and the flutes of the roller C, and then under and around the roller B. This motion is continued until the clothes are cleansed as far as practicable by machinery. It is obvious that the clothes are subjected in their motion to a beating, squeezing, and expanding operation. If it is found that wristbands, bosoms, and other parts of delicate garments require additional rubbing, the slatted carrier is tightened by the longitudinal screw-rods and the vertical arms, so that it is held stationary, and that part of the carrier which

is above the platform E is used as a hand wash-board to carry out this further operation upon the clothes. The use of the same slatted carrier that carries the clothes through the suds as a hand wash-board is a novelty in washing-machines, and the practicability of the same is obvious, for the two tensions at right angles, caused by the elevation of the roller D and the longitudinal movement of the roller B, in connection with the fixed platform E, insure a stationary condition of the parts while the hand-washing is thus being performed on the slats of the carrier.

What I claim as my invention is—

1. The arrangement of the large roller B, smaller end roller, C, central fluted roller, D, and inclined slatted carrier F within a wash-tub, in a manner and for the purpose substantially as described.

2. The arrangement of the platform E, slatted inclined carrier F, large roller B, smaller roller, C, fluted roller D, longitudinal screw-rods *d d*, and vertical screw-arms *g g*, in the manner and for the purpose described.

3. The arrangement of the clothes-confining cords *a* across the slatted carrier in an organization such as described, for the purpose set forth.

Witness my hand this 15th day of March, A. D. 1862, in the matter of my application for patent on washing-machine.

A. G. WILKINS.

Witnesses:

GUSTAVUS DIETERICH,
EDWIN S. JACOB.