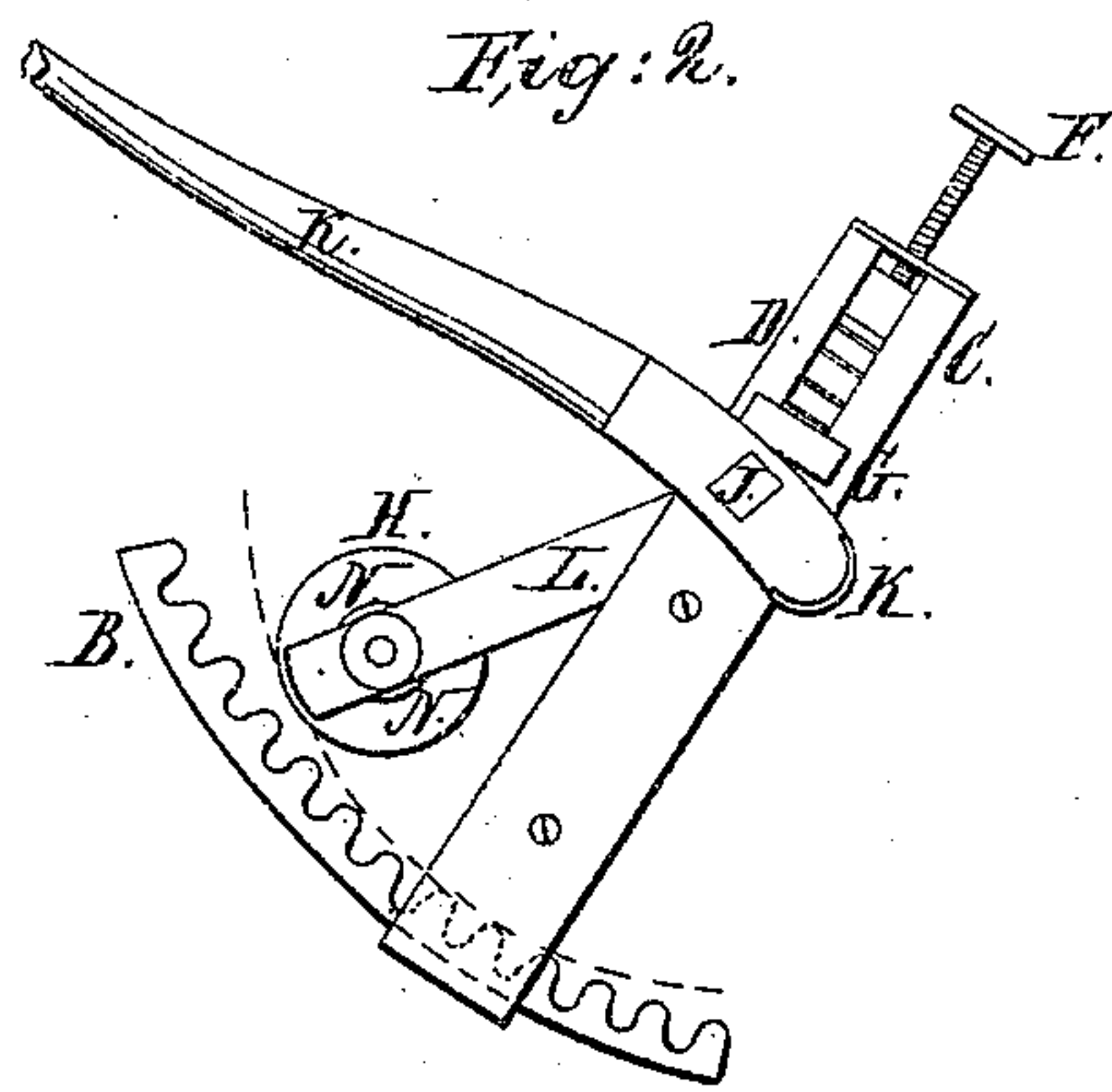
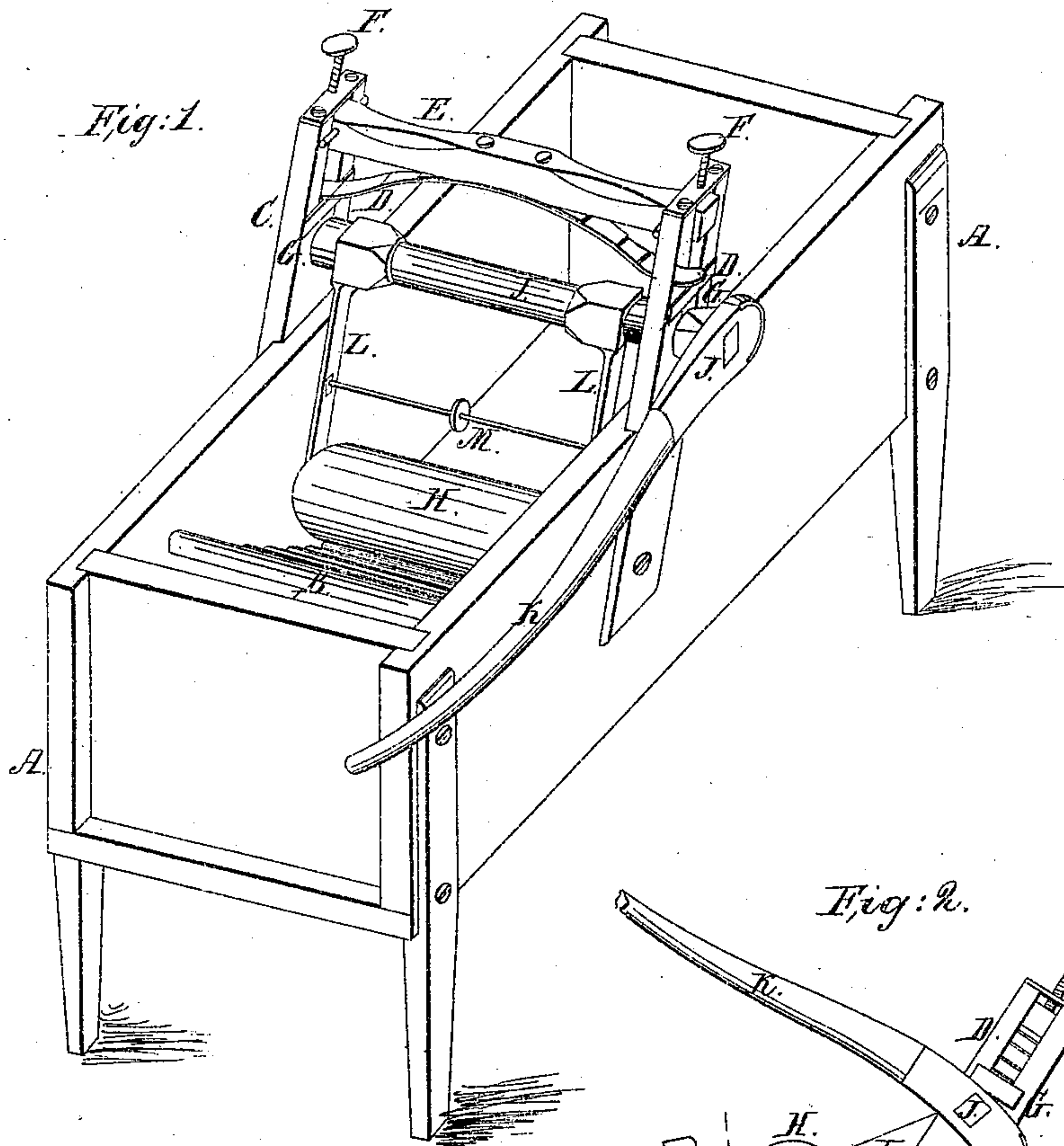


*C.H. Hale,*

*Washing Machine,*

*No. 43,020,*

*Patented June 7, 1864.*



*Witnesses:*

*John C. Ellis*  
*John C. Parker*

*Inventor:*

*Chauncey H. Hale*  
*by his Attorney J. Franklin Perzart*

# UNITED STATES PATENT OFFICE.

CHAUNCEY H. HALE, OF FAYETTEVILLE, NEW YORK.

## IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 43,020, dated June 7, 1864.

*To all whom it may concern:*

Be it known that I, CHAUNCEY H. HALE, of Fayetteville, Onondaga county, State of New York, have invented new and useful Improvements in Washing-Machines; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction, arrangement, and combination of the adjustable elliptic spring, adjustable arms, and adjustable screw-rod.

Figure 1 represents a perspective view of the machine; Fig. 2, a sectional view of the operating devices.

A represents the box of the washing-machine resting upon four feet; B, the ribbed concave or washing-board, sloping and curving from the top to within an inch of the bottom of the box. The ribs of the concave have a square groove between each rib to prevent the buttons on the clothes from being broken.

C represents an upright frame attached to the sides of the box, near the center of the box, having a half-elliptical spring, D, across the top, with a straight beam or cross-piece, E, above, which is adjusted by set-screws F at each side, which adjust the spring D so as to give pressure to the spring upon the vertical sliding boxes G to make the roller H accommodate itself to the thickness and variety of clothing being washed.

J represents a cross-piece, which extends across the box and operates in the upright frame C. It has a side lever, K, which is located on the outside of the box, and which is the handle to operate the machine. Two side posts or arms, L, extend from the cross-piece J, at the lower end of which the roller H is suspended, and revolves on its journals.

These side arms, L, are also adjustable by means of the cross screw rod, M, located above the roller H, so that the roller will rub, harder on the cloth when required. The ends of the arms L have circular plates N attached, which, as the screw-rod M is adjusted and tightened by means of a small wheel at its center, the arms L are drawn inward and press the plates N against the ends of the roller H, and serve as a brake to tighten or loosen the revolution of the roller.

The operator moves the handle or lever K up and down, (which operation is easily performed with very little labor,) and the cross-piece or axle J revolves sufficiently to move the arms L and roll back and forward over the cloth (or piece being washed) which rests upon the concave B, the roller moving closer to the lower end of the concave than at the top, so as to press the cloth tighter on its downward motion and work freer at the top, that the cloth or garment will not be ruffled on the board, but at the same time the machine allows any part of the garment to be washed where required more than the other, such as the wristbands, collar, or neck part of a shirt, where the friction can be applied with the best results, and not wear any other part of the garment, and the operator can move easily, handle, and turn the garment and wash any one spot or part of the cloth more than another.

What I claim as my invention, and desire to secure by Letters Patent, is—

The construction of the adjustable elliptic spring D, adjustable arms L, and adjustable screw-rod M, when arranged and combined as herein described, and for the purposes set forth.

CHAUNCEY H. HALE.

Witnesses:

J. FRANKLIN REIGART,  
JOHN HOLLINGSHEAD.