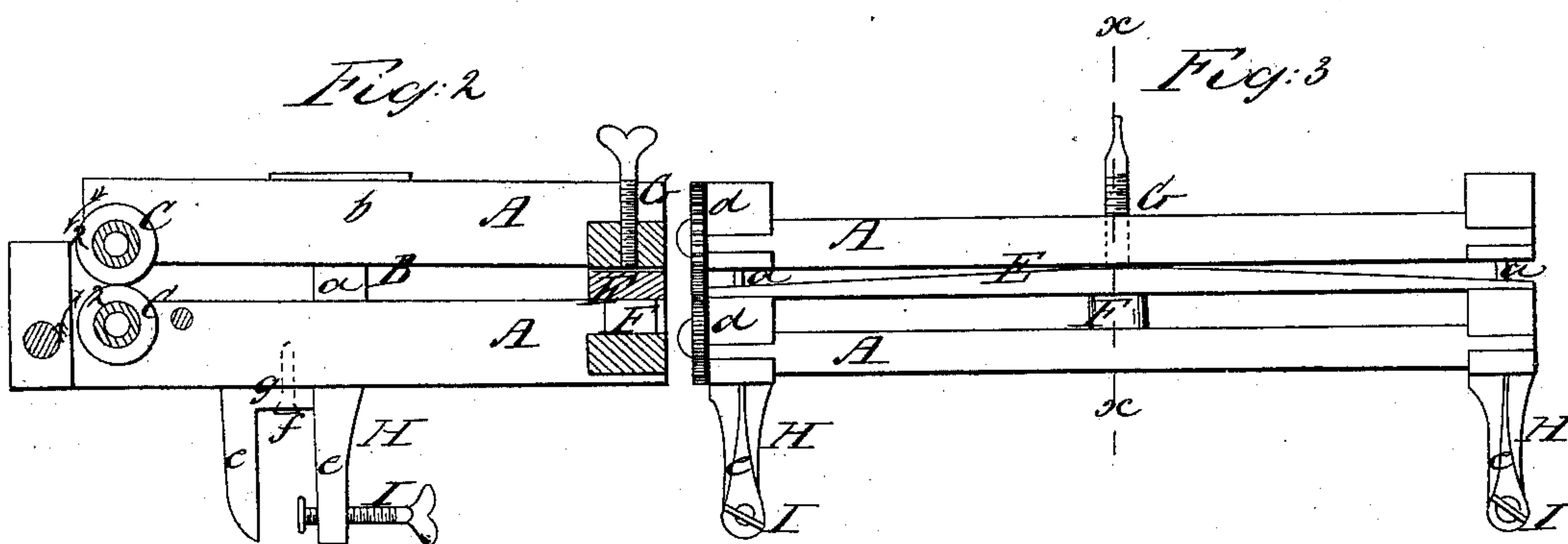
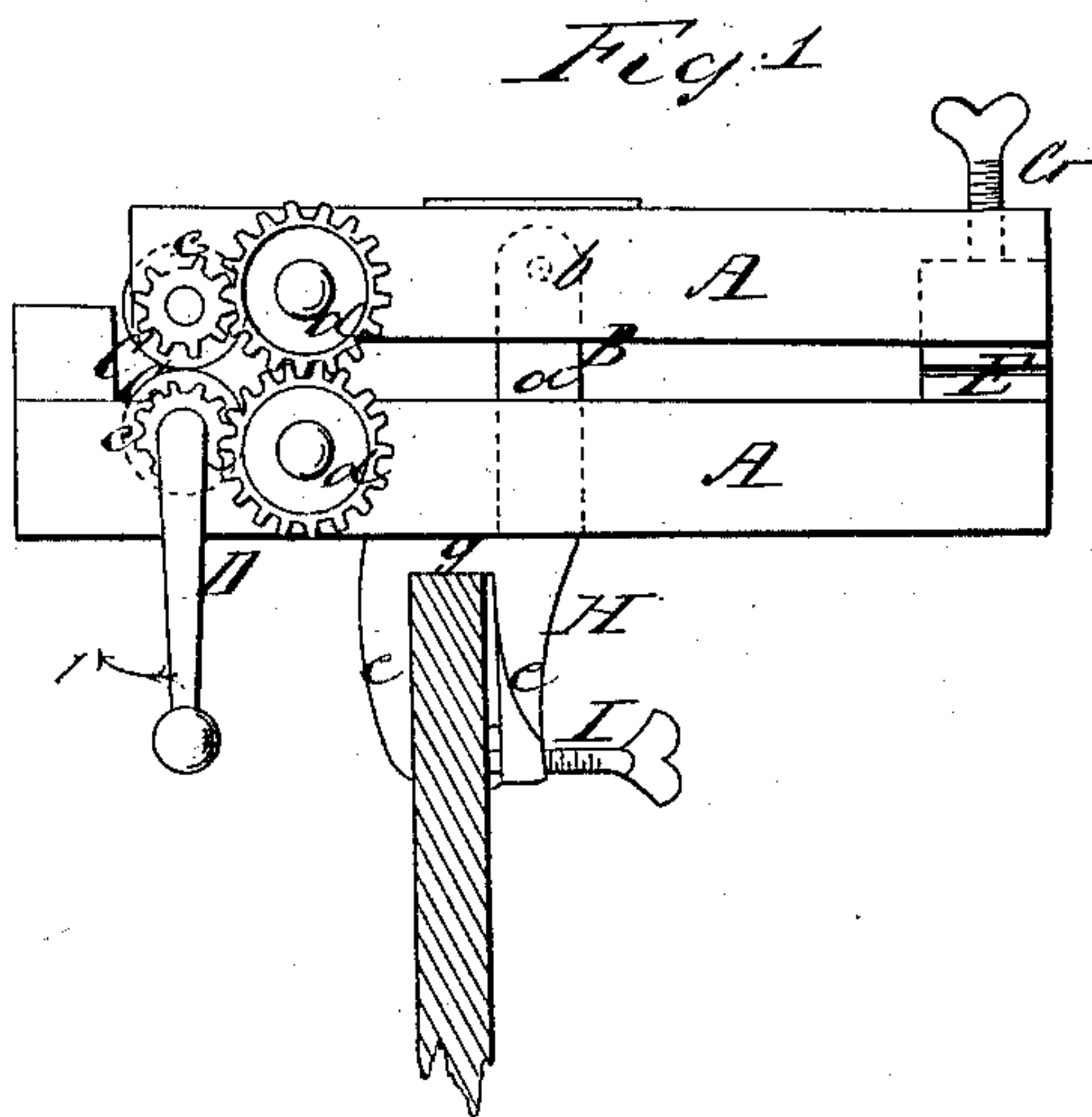


G. N. Bolles,

Wringer,

N<sup>o</sup> 46,046,

Patented Jan. 24, 1865.



Witnesses

C. L. Topliff  
Theo. Tusch

Inventor

George N. Bolles  
per Mann & Co  
Attorneys

# UNITED STATES PATENT OFFICE.

GEORGE N. BOLLES, OF KALAMAZOO, MICHIGAN, ASSIGNOR TO S. W. WALKER & CO., OF SAME PLACE.

## IMPROVED WRINGING-MACHINE.

Specification forming part of Letters Patent No. 46,046, dated January 24, 1865.

*To all whom it may concern:*

Be it known that I, GEORGE N. BOLLES, of Kalamazoo, in the county of Kalamazoo and State of Michigan, have invented a new and Improved Clothes-Wringing Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of my invention; Fig. 2, a vertical section of the same, taken in the line *x x*, Fig. 3; Fig. 3, a rear view of the same.

Similar letters of reference indicate corresponding parts.

The invention relates to a new and improved device for wringing clothes—such as are provided with pressure-rollers; and it consists in a novel construction of the frame, fastening for securing the wringer to the tub, and gearing, as herein shown and described, whereby a very simple and efficient wringer is obtained, and one which may be manufactured at a very moderate expense.

A A' represent two frames of rectangular form, and connected together by joints B B, composed of metal plates *a a*, which pass vertically through the side pieces of the lower frame, A, and fit in mortises in the upper frame, A', and secured therein by pivots *b*, the frame A' being allowed to work on said pivots, which are near to the center of said frame, as shown in Figs. 1 and 2. At one end of each frame A A' there is a roller, C. These rollers may be of india-rubber—the kind considered superior for clothes-wringing purposes. Other material, however, may be used. The rollers C C have a position one directly over the other, and the shaft of each roller has a pinion, *c*, upon it, said pinions gearing into wheels *d d*, which are placed or secured one to each frame A A', as shown clearly in Fig. 1, the wheels *d d* gearing into each other. A crank, D, is applied to the shaft of the lower roller C; and it will be seen that by turning said crank in the direction of arrow 1 motion will be given the two rollers C C in the direction of the arrows 2. At the rear of the lower frame, A, there is an elastic bar, E, with a spring, F, of india-rubber or

other material underneath it, and through the rear of the upper frame, A', a set-screw, G, passes and bears on the bar E. By adjusting this screw G the clothes may be subjected to a greater or less pressure, as desired, the bar E and spring F allowing the upper roller to yield or give to compensate for the varying thickness of the layer of clothes passing between them. The teeth of the wheels *d d* are of sufficient length to admit of this yielding of the upper roller and its frame without allowing said wheels to get out of gear, and as said wheels are nearer the pivots *b* than the pinions *c*, it follows, as a matter of course, that a greater movement will be allowed the the upper roller and frame than if the pinions *c c* were allowed to gear into each other in order to convey motion to the upper from the lower roller.

To the under side of the lower frame, A, there are secured two clamps, H H, one to each side piece. These clamps are composed each of two prongs, *e e*, which are sufficiently far apart to fit over the edge of the tub, and each clamp is secured to the frame A by a screw, *f*, at the center of the top bar, *g*, which connects the prongs. These central screws admit of the turning or adjusting of the clamps to suit the diameter of the tub. One of the prongs *e* of each clamp H has a screw, I, passing through it to secure the prongs, and consequently the wringer, to the tub.

By this simple arrangement I obtain a very efficient and economical clothes-wringer. There are no parts liable to get out of repair nor to interfere with the passage of the clothes between the rollers.

I claim as new and desire to secure by Letters Patent—

1. The two frames A A', provided with rollers C C, and connected together by the joints B B, as shown, in connection with the elastic bar E, spring F, and set-screw G, all arranged substantially as and for the purpose specified.

2. The gearing *c c d d*, in combination with the two frames A A' and rollers C C, substantially as and for the purpose set forth.

GEO. N. BOLLES.

Witnesses:

WM. MACK,

ELISHA LONDON.