

H. E. SMITH.
Improvement in Clothes-Wringers.
No. 131,714. *Fig. 1.* Patented Sep. 24, 1872.

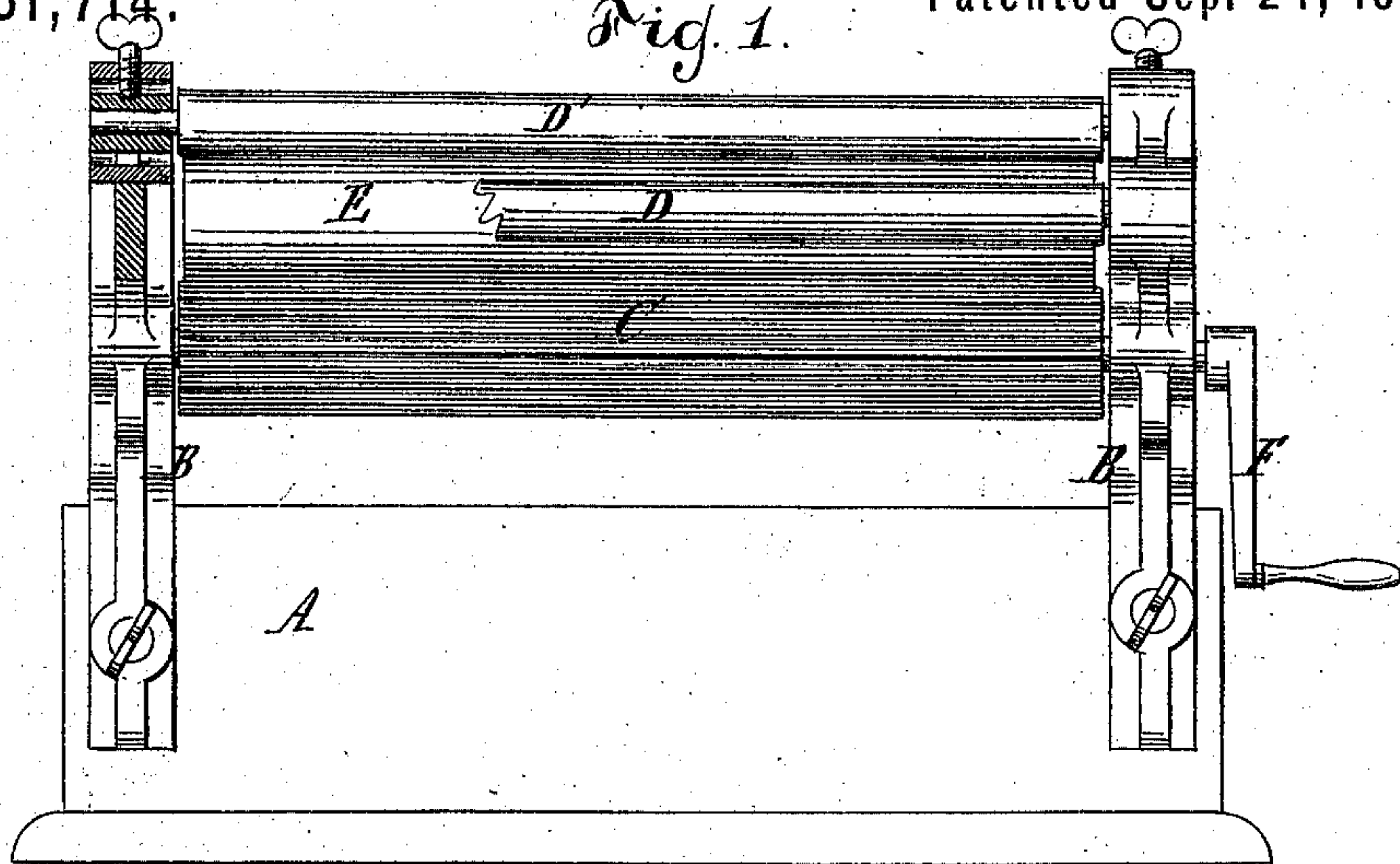


Fig. 2.

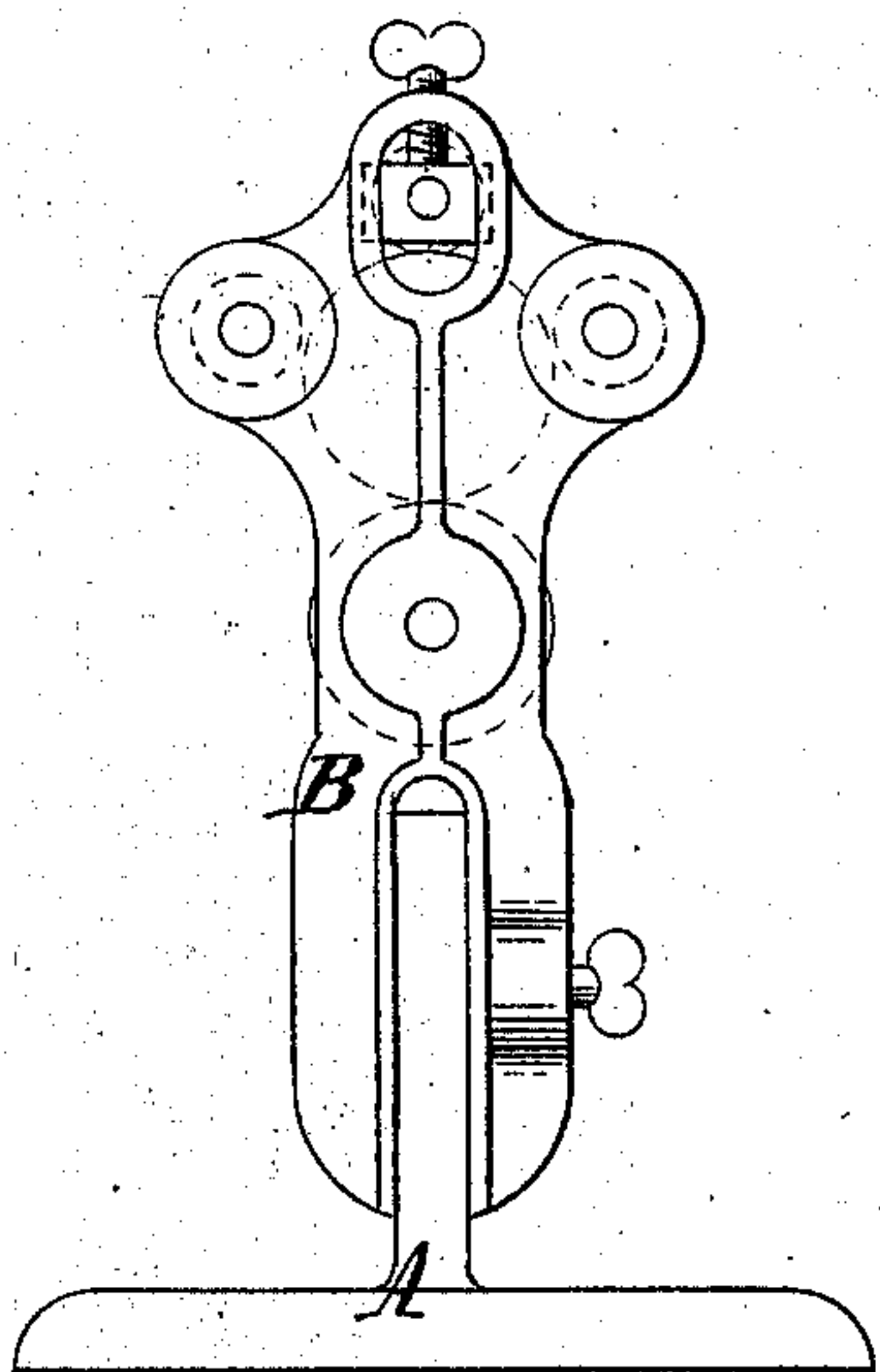
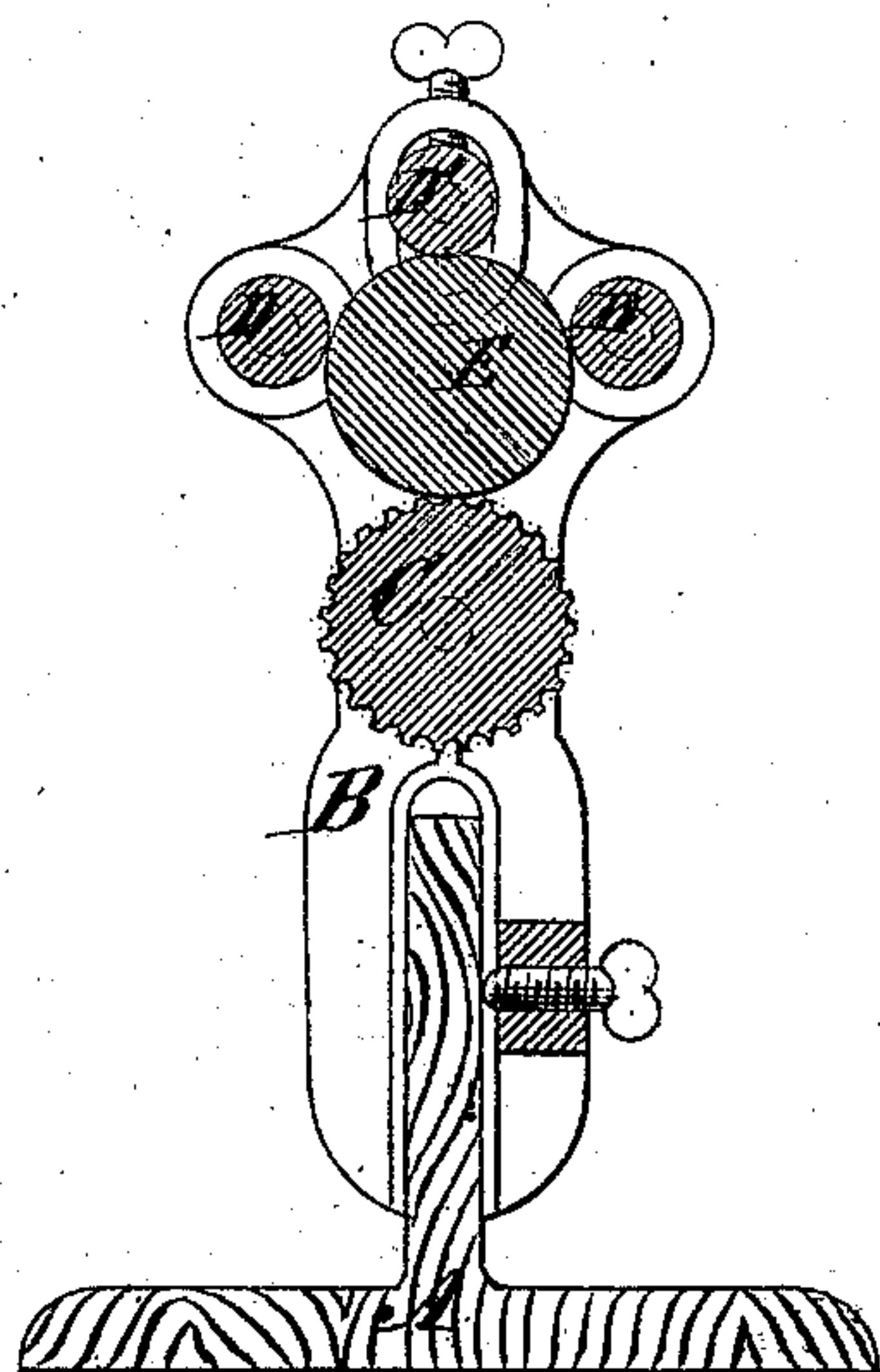


Fig. 3.



Witnesses
C. Wählers.
Ernst Billmeyer.

Inventor.
Hamilton E. Smith
per
Van Santvoord & Haef
Attys

UNITED STATES PATENT OFFICE.

HAMILTON E. SMITH, OF NEW YORK, N. Y.

IMPROVEMENT IN CLOTHES-WRINGERS.

Specification forming part of Letters Patent No. 131,714, dated September 24, 1872.

CASE A.

To all whom it may concern:

Be it known that I, HAMILTON E. SMITH, of the city, county, and State of New York, have invented a new and useful Improvement in Clothes-Wringers; and I do hereby declare the following to be 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 drawing forming part of this specification, in which drawing—

Figure 1 represents a sectional front view of this invention; Fig. 2 is an end view of the same; and Fig. 3 is a transverse section of the same.

Similar letters indicate corresponding parts.

This invention consists in the arrangement of a rough surface-driver, in combination with a loose elastic roller, held in position by two or more guide-rollers in such a manner that, by turning the rough surface-driver a revolving motion is imparted to the elastic roller without the use of gear-wheels; and that the clothes to be wrung are caused to travel through between the rough surface-driver and the elastic roller without sustaining any injury—said elastic roller being capable of accommodating itself to the varying thickness of the clothes exposed to its action.

In the drawing, the letter A designates a frame, provided with two standards, B B, which form the bearings for the rough surface-driver C, and for the guide-rollers D D D'. Between these guide-rollers and the rough surface-driver is placed a loose elastic roller, E, which is depressed upon the rough surface-driver by the upper guide-roller D', the bearings of which are by preference so arranged that they can be adjusted up or down by means of set-screws; but said bearings may also be made stationary. The bearings of the guide-rollers D D are stationary, and they are so placed that, by means of said guide-rollers the elastic

roller is retained securely in position over the driver C. One of the gudgeons of the rough surface-driver extends through its journal-box, and on its end is secured a hand-crank or winch, F, which serves to impart motion to the apparatus. In the example shown in the drawing, the rough surface-driver consists of a fluted metallic roller, but it must be remarked that said roller might be made of wood or any other suitable material, and provided with a surface of any suitable nature and of sufficient roughness to prevent the same from slipping or gliding on the clothes being passed through the wringer. It will also be seen that one of the guide-rollers might be dispensed with by placing two such rollers in the proper position over the loose elastic roller, but in practice I prefer to use three guide-rollers.

By combining a rough surface-driver with a loose elastic roller held in position by two or more guide-rollers, a very simple wringer is produced—no gear-wheels being required to transmit the motion of the driver to the guide-rollers, and by the action of the two elastic rollers in conjunction with the rough surface-driver, the moisture is effectually pressed out of the clothes made to pass through my wringer, and all danger of injuring the clothes is avoided, since the loose roller is not liable to slip on the clothes, but will always move with the same as long as the motion of the rough surface-driver continues.

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

The combination of a rough surface-driver with a loose elastic roller and two or more guide-rollers, substantially in the manner herein shown and described.

HAMILTON E. SMITH.

Witnesses:

WM. H. ALLEN,
JERRY POTTS.