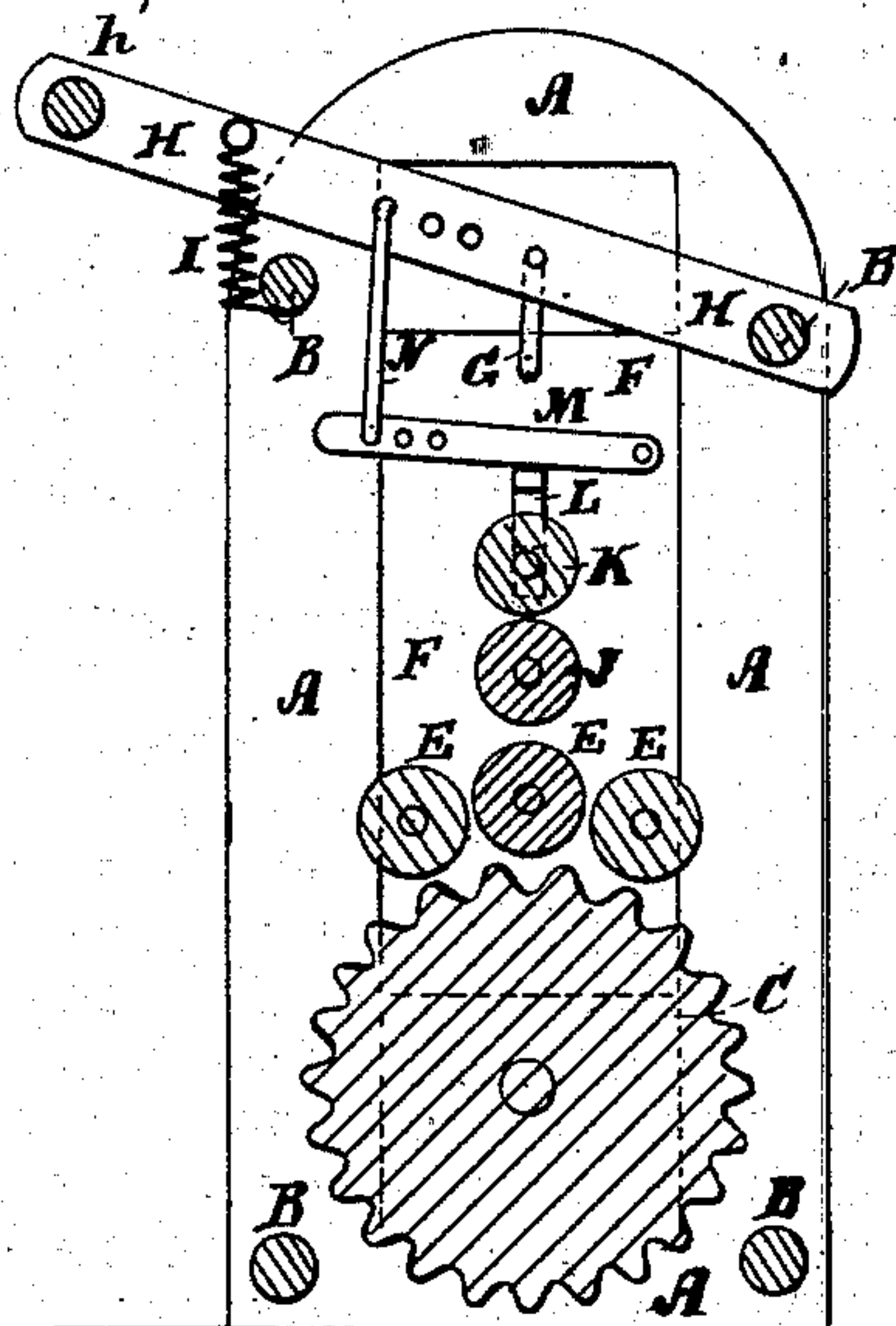
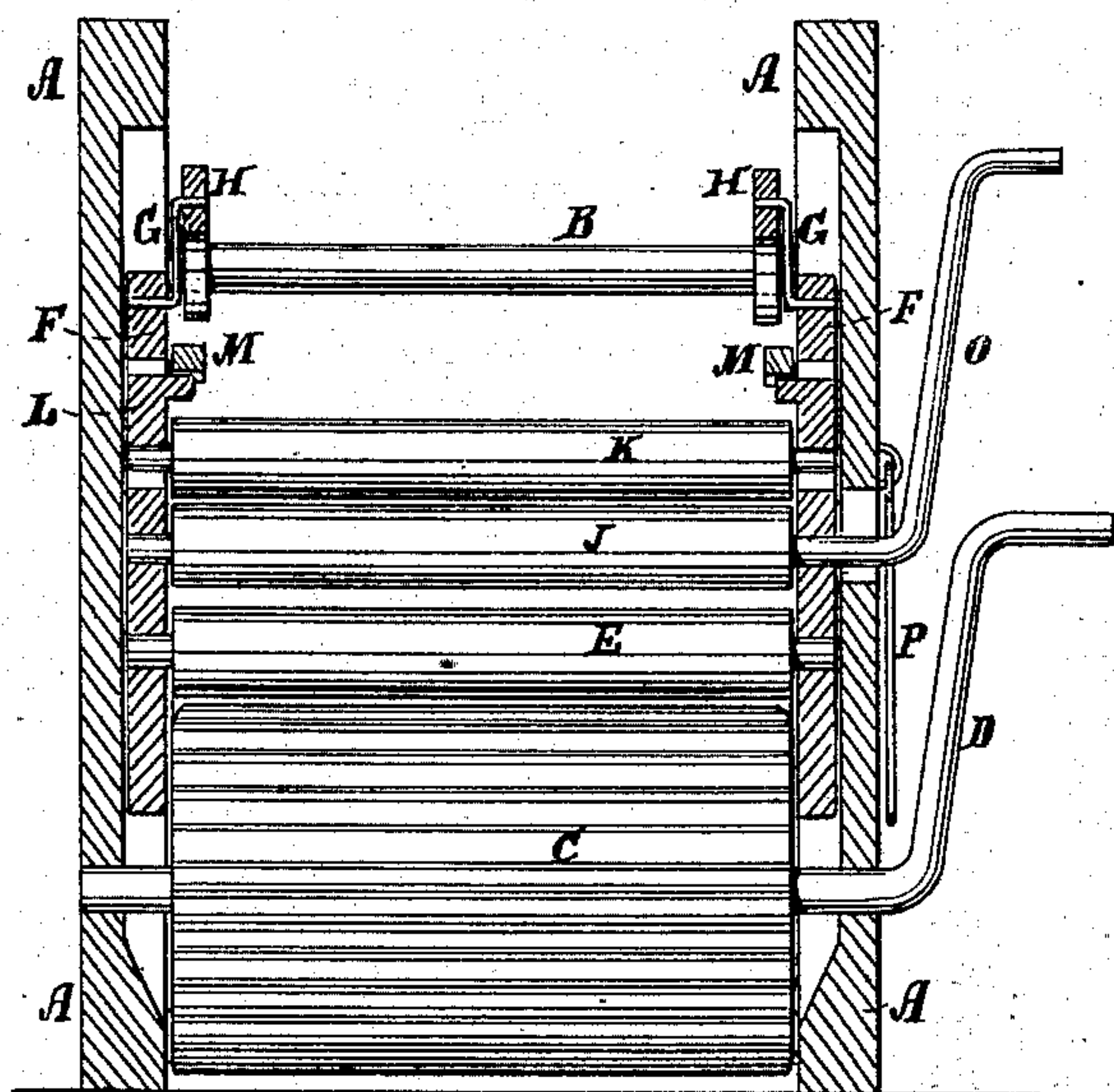


Patented Jan. 5, 1875.

Fig. 2.



A Bonnenstein Hof.
Hilgner

INVENTOR:
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Marr & Co.
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UNITED STATES PATENT OFFICE.

JOSEPH S. MAUGHLIN AND WILLIAM C. MARR, OF ONAWA, IOWA.

IMPROVEMENT IN COMBINED WASHING AND WRINGING MACHINES.

Specification forming part of Letters Patent No. **158,383**, dated January 5, 1875; application filed April 4, 1874.

To all whom it may concern:

Be it known that we, JOSEPH S. MAUGHLIN and WILLIAM C. MARR, of Onawa, in the county of Monona and State of Iowa, have invented a new and useful Improvement in Combined Clothes Washer and Wringer, of which the following is a specification:

Figure 1 is a vertical section of our improved machine. Fig. 2 is a vertical cross-section of the same.

Similar letters of reference indicate corresponding parts.

Our invention has for its object to furnish an improved machine which shall be so constructed that the clothes may be washed and wrung by the same machine, and which may be readily adjusted to give any desired amount of pressure upon the clothes, and at the same time shall be simple in construction, convenient in use, and easily operated.

The invention consists in the combination of the set of washing-rollers, and the set of wringer-rollers with the same blocks or bearings, and the same standards; in the combination of the connecting-rods, the levers, and the springs with the standards, and the blocks that carry the rollers; and in the combination of the small blocks or half-bearings, the short levers, and the adjustable connecting-rods with the blocks that carry the rollers, the upper wringer-roller, the long levers, and the springs, as hereinafter fully described.

A are the standards, which are made wide, and are connected and held in their proper relative positions by rounds or cross bars B at their upper and lower ends. C is a large grooved roller pivoted to the lower part of the standards A, and one of the journals of which projects, and has a crank, D, formed upon or attached to it. E is a set of small rollers, between which and the roller C the clothes are washed. Any desired number of the rollers E may be used, and they may be placed above or below the roller C, as may be desired. The journals of the rollers E revolve in bearings in the blocks F, which slide up and down in recesses in the inner sides of

the standards A. To the upper ends of the blocks F are attached the lower ends of the short rods G, the upper ends of which are attached to the levers H, which are pivoted at one end to one of the top rounds B. To the levers H, near their other ends, are attached the ends of the coiled springs I, the other ends of which are attached to the other top round B, so that the tension of the springs I may apply pressure to the clothes being washed. The free ends of the levers H are connected by a round, *h'*, which serves as a handle, so that the levers H may be raised and lowered to resist or assist the springs I as less or more pressure may be required for the clothes. J is the lower wringer-roller, the journals of which revolve in bearings in the blocks F. K is the upper wringer-roller, the journals of which revolve in slots in the blocks F, and upon them rest the blocks or half-bearings L, also placed in said slots. The blocks L have projections formed upon the inner sides of their upper ends, upon which rest the short levers M, the rear ends of which are pivoted to the blocks F. To the other ends of the levers M are attached the lower ends of the rods N, the upper ends of which are attached to the levers H. Several holes or notches are formed in the levers M H to receive the ends of the rods N, so that the said rods may be readily adjusted to regulate the pressure upon the clothes, as may be required.

By this arrangement, the operator by raising or lowering the free ends of the levers H with the hand, can decrease or increase the pressure upon the clothes, as may be required.

One of the journals of the lower wringer J passes out through a slot in the standard A, and to it is attached, or upon it is formed, a crank, O, by which the wringer is operated.

The machine may be placed in an ordinary wash-tub, and, in addition to the ordinary fastenings, may be steadied by hooks P pivoted to the standard A, and which are designed to be hooked into staples attached to the said tub.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. In combination with grooved standards A, cylinder C, and series of rollers E', the sliding blocks F, lever-frame H, connecting-links G, and springs I, as herein described.

2. In combination, with the spring-pressed lever-frame H and sliding blocks F, of the

washer, the wringing-rollers J K, lever M, and connections L N, arranged as shown, and operating in the manner set forth.

J. S. MAUGHLIN.
WM. C. MARR.

Witnesses:

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JNO. E. SELLECK.