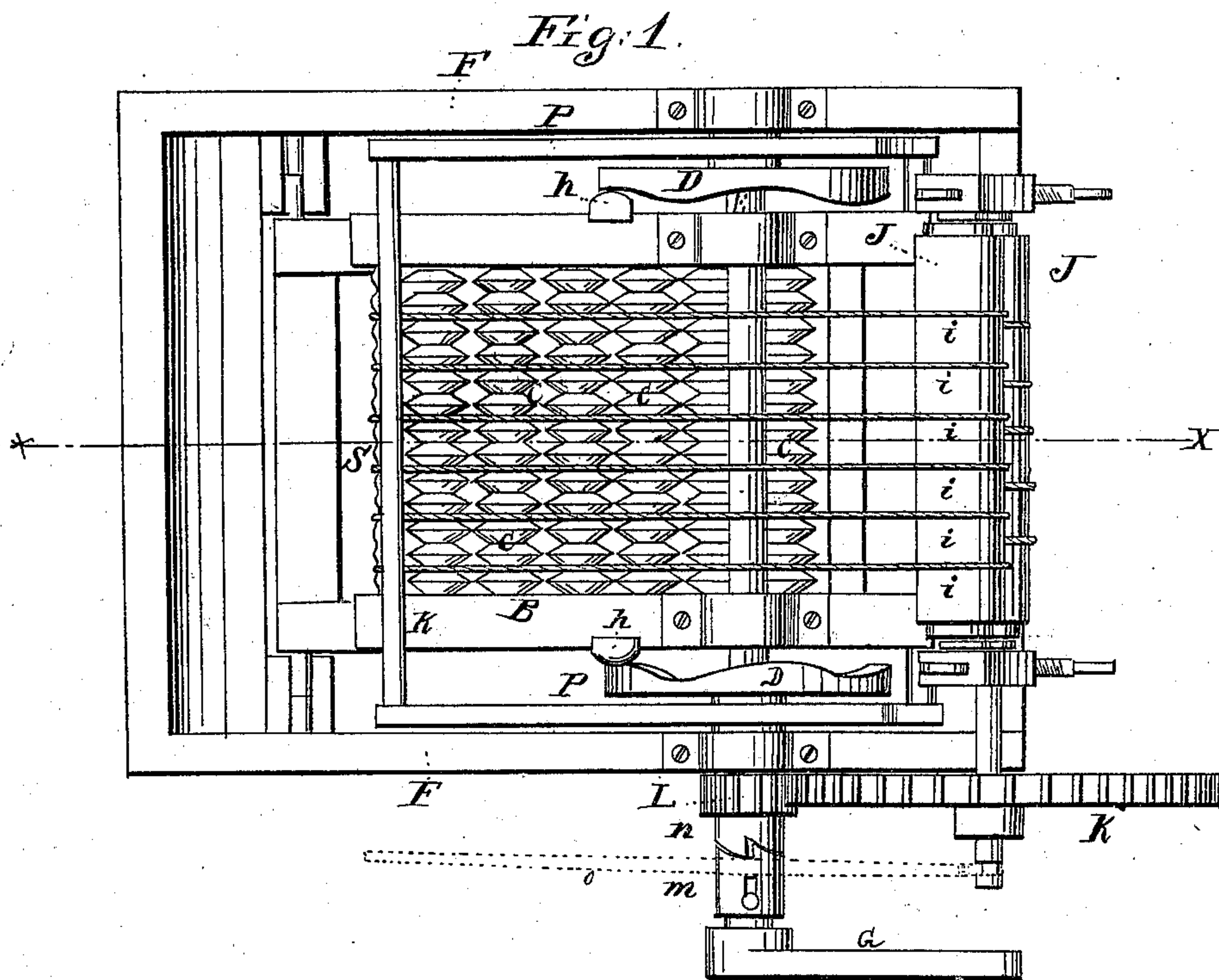
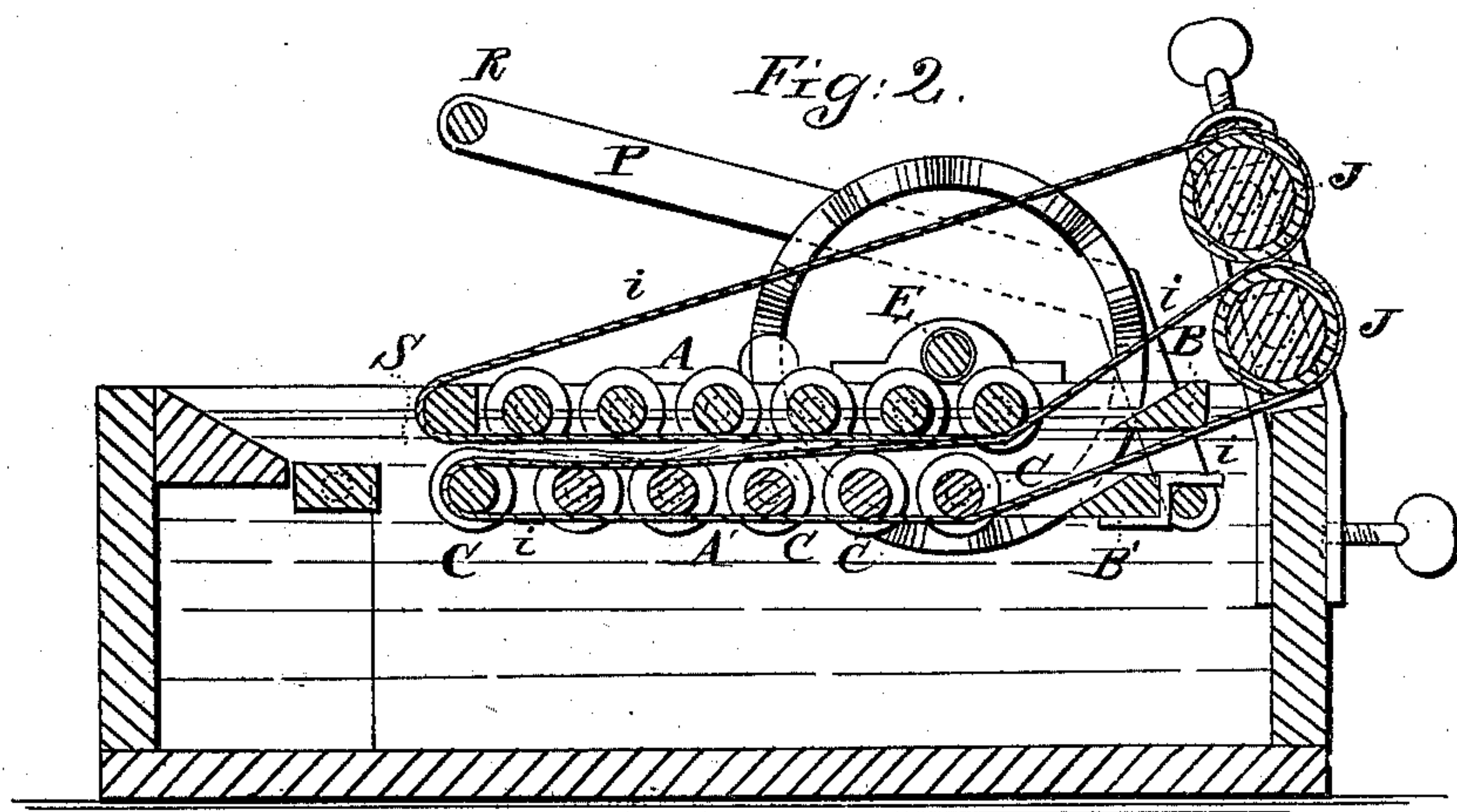


R. K. Tomlinson.
Washing Mach.

N^o 80,784.

Patented Aug. 4, 1868.



Witnesses:

H. C. Ashkettle
Wm A Morgan

Inventor:

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Attorneys.

United States Patent Office.

ROBERT K. TOMLINSON, OF BROWNSBURG, PENNSYLVANIA.

Letters Patent No. 80,784, dated August 4, 1868.

IMPROVED WASHING AND WRINGING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ROBERT K. TOMLINSON, of Brownsburg, in the county of Bucks, and State of Pennsylvania, have invented a new and improved Washing and 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.

This invention relates to a new and improved machine for washing or cleansing clothes, and for wringing them at the same operation; and the invention consists in a construction and arrangement that will keep the clothes thinly spread between two rubbing surfaces, which surfaces are given a quick and short alternate reciprocal motion, the same surfaces receiving at the same time any desired amount of pressure by means of weights, levers, or springs, and also in providing means for stopping the feeding-motion while the rubbing is continued, and in the arrangement for combining the washing and wringing in the same operation, as will be hereinafter more fully described.

Figure 1 represents a top or plan view of the machine, showing its general arrangement and the method of operation.

Figure 2 is a vertical longitudinal section through the line *x x* of fig. 1.

Similar letters of reference indicate corresponding parts.

A A' represent two horizontal parallel rubbing surfaces formed of grooved or serrated rollers, C, placed in suitably-constructed frames, as seen in the sectional drawing, fig. 2, at B B'.

A reciprocal lateral alternate motion is imparted to these rubbing surfaces, A A', by means of revolving cam-wheels, D D, placed on each side of them, and attached to the crank-shaft E.

F represents the box or washing-vessel which supports the operating parts of the machine.

G is the crank for turning the shaft and imparting motion to the washing-machine, as well as to the wringer, which wringer is attached to the box F.

A pulley may be attached to the shaft E, when it is desired to operate the combined machine by other than hand-power.

Upon each side of each of the frames A A' there are projecting surfaces or friction-rolls, *h*, upon which the series of cams on the cam-wheels, D, operates as those wheels are revolved, and the cams are so arranged that an alternate reciprocal motion is produced thereby.

In addition to this rubbing lateral motion between the frames A A', there is a feeding-motion produced by the revolution of the cords *i*.

J J represent the rollers of a clothes-wringer, which wringer is attached to the end of the box F in any suitable manner, so arranged in regard to the rubbing surfaces that the cords *i* are revolved or drawn between and around the frames and rubbing surfaces, as the wringer is operated.

Two series of these cords are drawn in between the rubbing surfaces as the wringer is revolved, and the clothes to be washed are drawn in between the two series of cords and carried from the rubbing surfaces into the wringer.

The wringer is operated by the gear-wheel K and the pinion L on the shaft E. This pinion is attached to a sleeve, *n*.

m is a sliding sleeve-coupling, which is operated by the lever *o*, so that the wringer and feed-motion can be ungeared and stopped while the reciprocating rubbing motion is continued, thus affording opportunity to rub and cleanse the more dirty parts of the clothes.

P P represent levers connected together by the bar R. These levers operate upon the lower surface or frame A', for increasing or regulating the pressure between the rubbing surfaces.

The clothes are fed in between the rubbing surfaces at S, where they can be retained and rubbed as long as desired by stopping the motion of the wringer, as before stated.

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

1. Imparting an alternate reciprocating motion to each series of upper and lower rollers, A A', by means of the cams D, and a rotary motion to each roller by the double series of cords i, when the cords of the upper series are driven from the upper wringer-roll and the cords of the lower series from the lower wringer-roll, as herein described, for the purpose specified.

2. The cam-wheels D D, in combination with the rubbing surfaces A A', by which the reciprocal motion to those surfaces is imparted.

3. The combination of the upper and lower series of rollers A A', cams D, levers P, bar R, double series of cords i, and wringing-rolls J, arranged and operating as described, for the purpose specified.

The above specification of my invention signed by me, this 12th day of March, 1868.

ROBT K. TOMLINSON.

Witnesses:

WM. F. McNAMARA,
ALEX. F. ROBERTS.