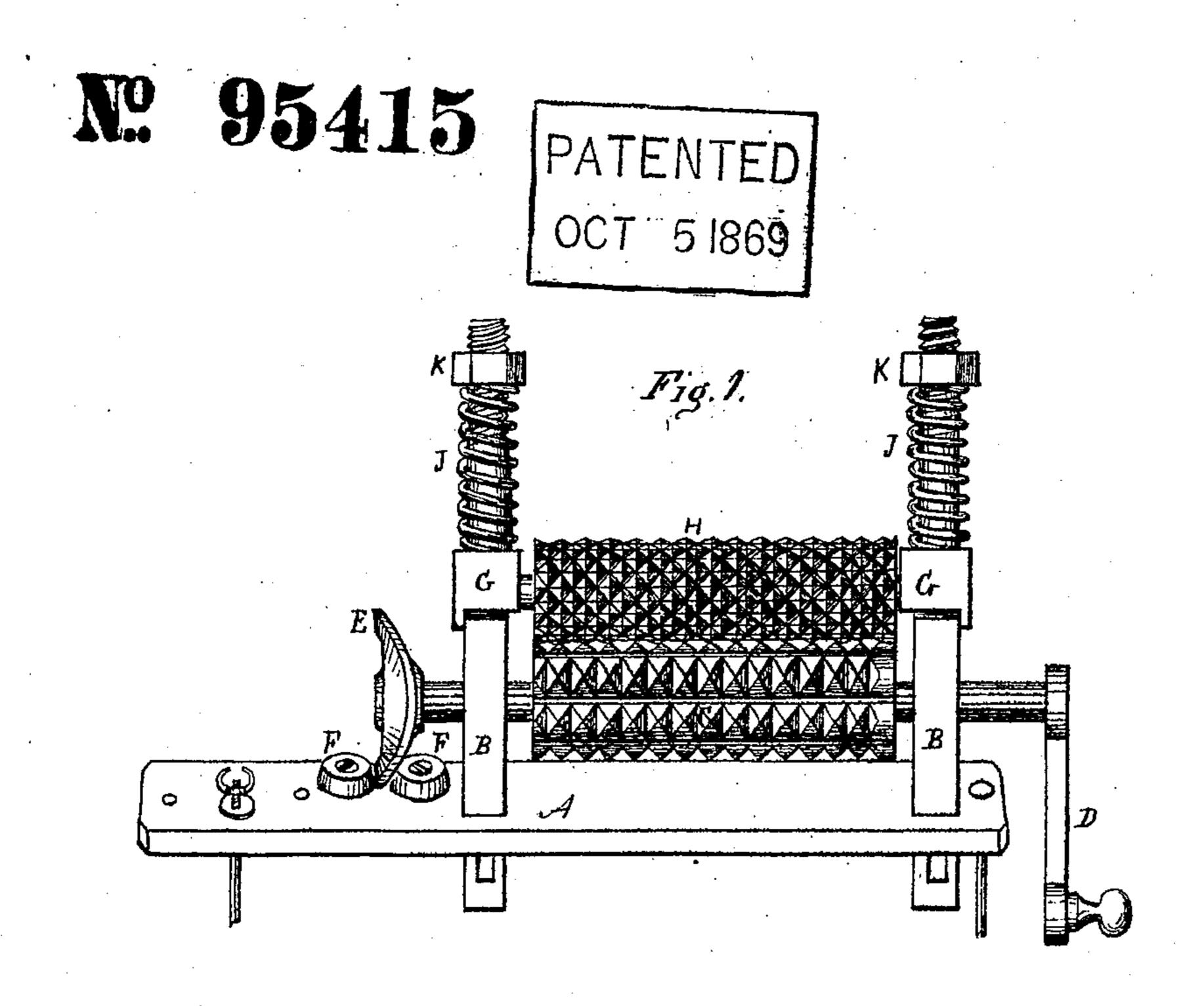
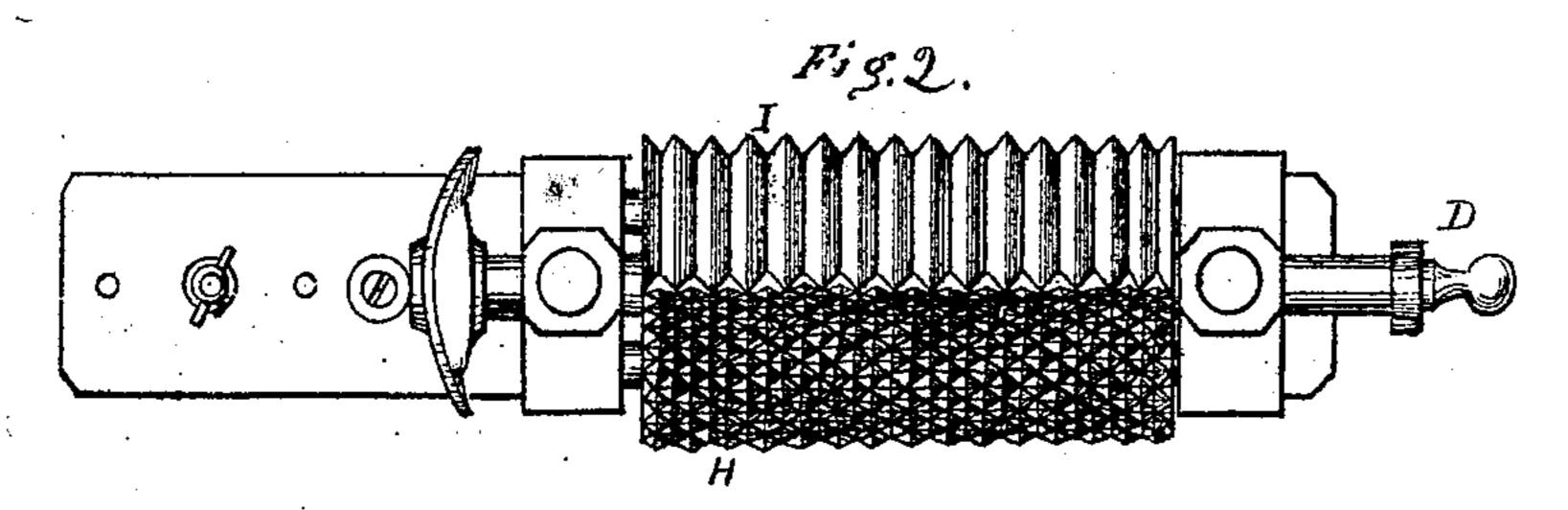
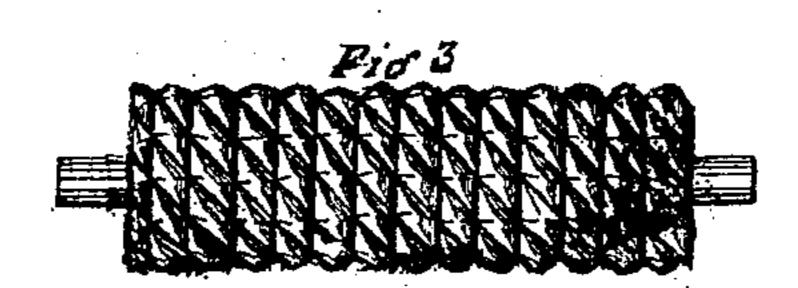
BEERS AND COUCH.

Washing Machine.







Witnesses Malennis MM. M. Dennis

Inventors:

Brunson B. Beero Nathan Couch Bytheir Atty. J. Dennis J.

Anited States Patent Office.

BRUNSON B. BEERS AND NATHAN COUCH, OF NEW FAIRFIELD, CONNECTICUT.

Letters Patent No. 95,415, dated October 5, 1869.

IMPROVED WASHING-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 we, Brunson B. Beers and Nathan Couch, both of New Fairfield, Fairfield county, State of Connecticut, have invented certain new and useful Improvements in Washing-Machines; and we do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art to make and use them, without further invention or experiment.

The nature of our invention consists in the peculiar construction and arrangement of the devices described in the following specification, and represented in the accompanying drawings, in which—

Figure 1 is an elevation of a washing-machine, with our improvements;

Figure 2 is a plan or top view; and

Figure 3 shows a roller fluted different from the others.

In these drawings-

A is a bar or plank of wood, to be placed across the wash-tub and fastened in some convenient manner.

In or to the plank A we fasten the standards B B, and perforate them for the journals of the large roller C to turn and traverse in, and to one of these journals we apply a crank, D, to turn it, and to the other we apply a swash-plate or side cam, E, to work between the rollers F F, and traverse the roller C.

These rollers F F turn on pivots in the bar A, to allow the cam E to work with very little friction.

The upper portions of the standards B B are made small enough to pass through the yokes G G, which are made in the form shown, and perforated for the journals of the rollers H and I to turn in; and the spiral springs J J are applied around the standards B, which have screw-nuts, K K, on their upper ends, to act against the springs J, and make the springs which push the yokes G down, press the rollers H and I down against the roller C, or against the clothes placed between the roller C and the rollers H and I, so that by turning the roller C, the clothes will be both rubbed and squeezed at the same time, and washed most beautifully, and as near like the knuckles of a washingwoman as they can be well arranged to do.

The roller H is grooved two ways, spirally, as shown in the drawing, to form pyramidal projections or protuberances, to act on the clothes and wash them, and the rollers C and I may be grooved in the same way, or the roller C may be grooved parallel with its axis in one direction, and at a right angle in the other direction, so as to form either square or oblong pyramids, as shown in the drawing, and the roller I may be grooved roundways or at a right angle to its axis, so as to form ribs running around the roller, as shown in the drawing, fig. 2.

If preferred, for any cause, the rolls, one or more, may be grooved parallel with the axis in one direction and spirally in the other, or grooved at right angles to the axis in one direction and spirally in the other, so as to form comb or lozenge-shaped pyramids on the surface of the roller.

If the rollers H and I are grooved roundways only, or at right angles to its axis, the grooves in one roller should be made to come opposite to the ribs on the other roller, so as to press different portions of the clothes.

We contemplate that weights may be substituted for springs in our machine, and that one long traversing-roller might serve for several pairs of short rollers in separate frames.

To use our machine, we immerse the clothes in a tub of water, and fasten the machine to the tub, and run the clothes through between the rollers H and I and the roller C, by turning the roller C, and continuing the process as long as may be necessary to wash them clean.

We claim the combination and arrangement of the standards B B, rollers C, H, and I, yokes G G, side and cam E, working between the rollers F F, all substantially as described for the purpose set forth.

BRUNSON B. BEERS. NATHAN COUCH.

Witnesses:

nesses: Geo. W. Wheeler, Lewis L. Hopkins.