

A ASSMANN.

Improvement in Washing-Machines.

No. 114,250.

Patented May 2, 1871.

Fig. 1.

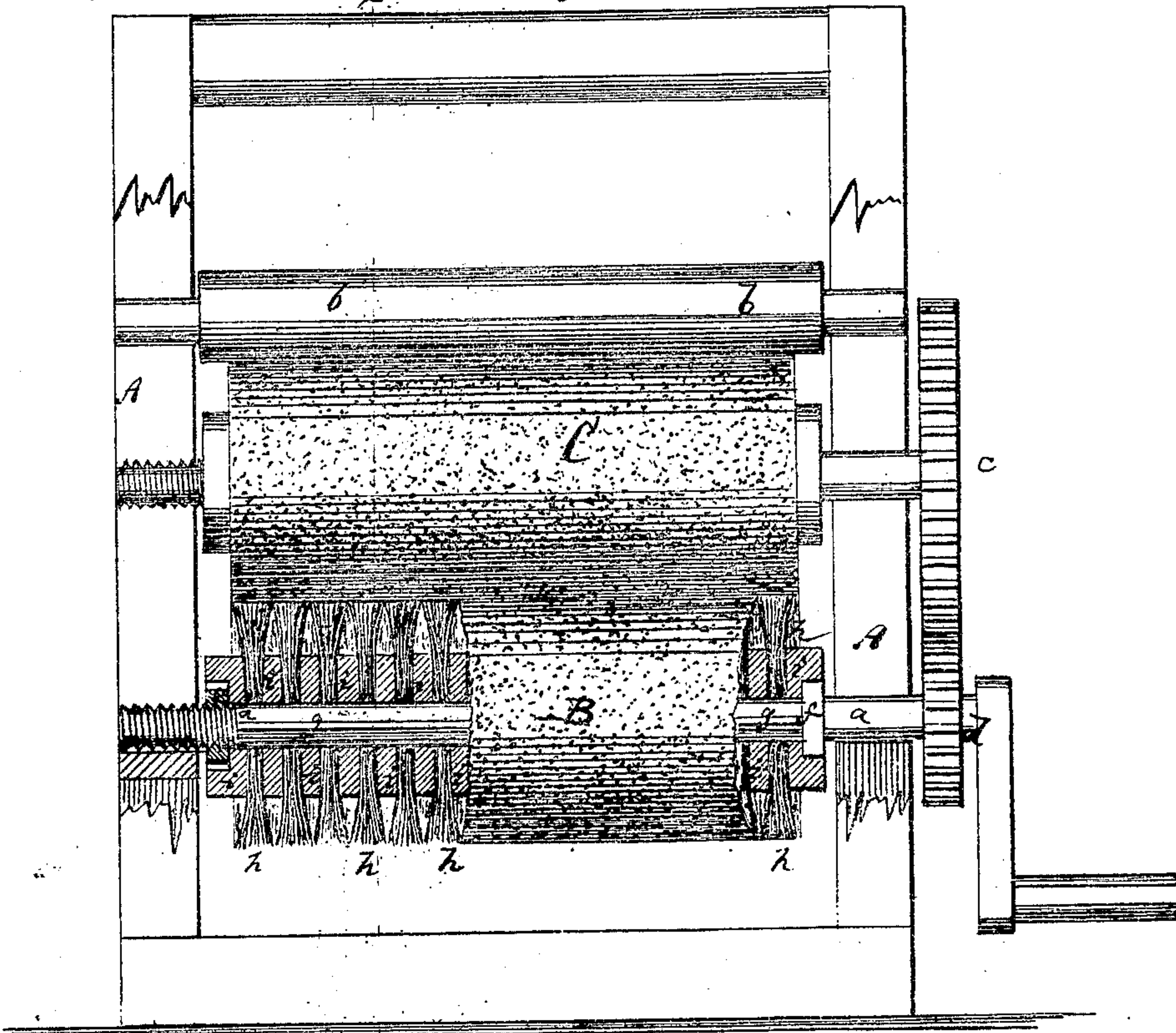
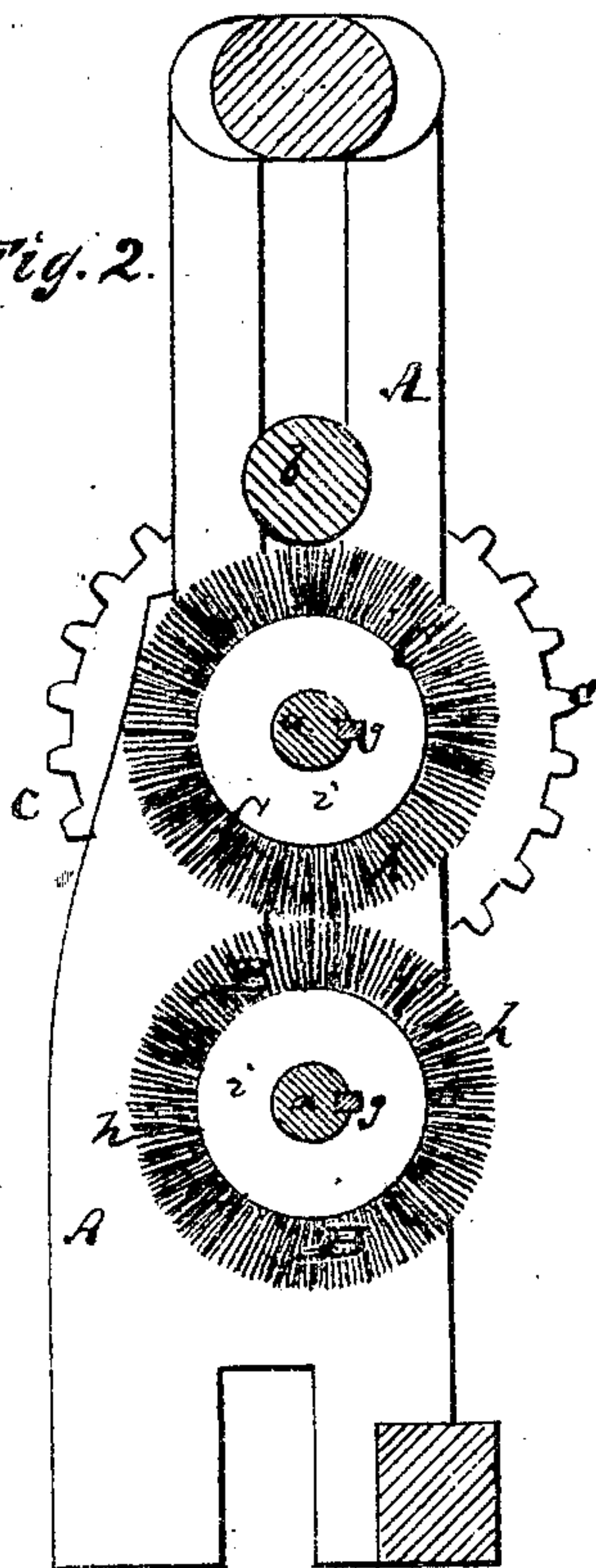


Fig. 2.



Witnesses:

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ALBERT ASSMANN, OF RAHWAY, NEW JERSEY.

Letters Patent No. 114,250, dated May 2, 1871.

IMPROVEMENT IN WASHING-MACHINES.

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, ALBERT ASSMANN, of Rahway, in the county of Union and State of New Jersey, have invented a new and improved Washing-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 represents a side view, partly in section, of my improved washing-machine.

Figure 2 is a vertical transverse section of the same, taken on the plane of the line *z z*, fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to a new washing-machine, in which a pair of rotating brushes, which are revolved with unequal velocities, are employed.

The invention consists in the arrangement of the said rotating brushes geared together so as to revolve with unequal velocities.

The chief object of the invention is to prevent the injury to the fabric produced by the ordinary washing-machines, and, at the same time, provide for more rapid and thorough operation. The brushes do not injure the fabric and are, in fact, not strong enough to tear it, but only to remove impurities from the surface of the same.

A in the drawing is the frame of my improved washing-machine. In it are hung two cylindrical horizontal brushes, B and C, the axle A of the lower brush resting on suitable journals of the frame, while the upper brush rests bodily upon the lower, a weighted roller, *b*, holding it down thereon.

The axles of the two brushes are, by suitable wheels,

c d, geared together in such manner that one brush, B, will revolve faster than the other whenever rotary motion is applied to the same.

The garments or articles to be cleaned are put between the two brushes while they are revolved in opposite directions. The slower brush C will slowly feed the fabric along, while the other rubs the surface of the same and rapidly and thoroughly cleans it.

The cylindrical brushes I prefer to make in the manner indicated in fig. 1. The tufts *h h* of bristles are placed between wooden or metallic washers *i i*, which are fitted upon the axle *a*, and finally crowded together by a nut, *e*, applied to the axle.

The axle *a* has a flange or head, *f*, toward which the washers are crowded by the nut *e* to compress the bristles. In this manner the brushes are made strong and reliable without the use of wire fastenings or glue, and can be more rapidly put together than the brushes now in use.

The washers may, by grooves and feathers *g*, or otherwise, be connected with the axle so that they cannot revolve on the same.

Having thus described my invention,

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

The two cylindrical brushes B C, having a differential velocity and the one resting upon the other, combined with a superincumbent loose and yielding roller, *b*, for the purpose specified.

The above specification of my invention signed by me this day of February, 1871.

ALBERT ASSMANN.

Witnesses:

GEO. W. MABEE,

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