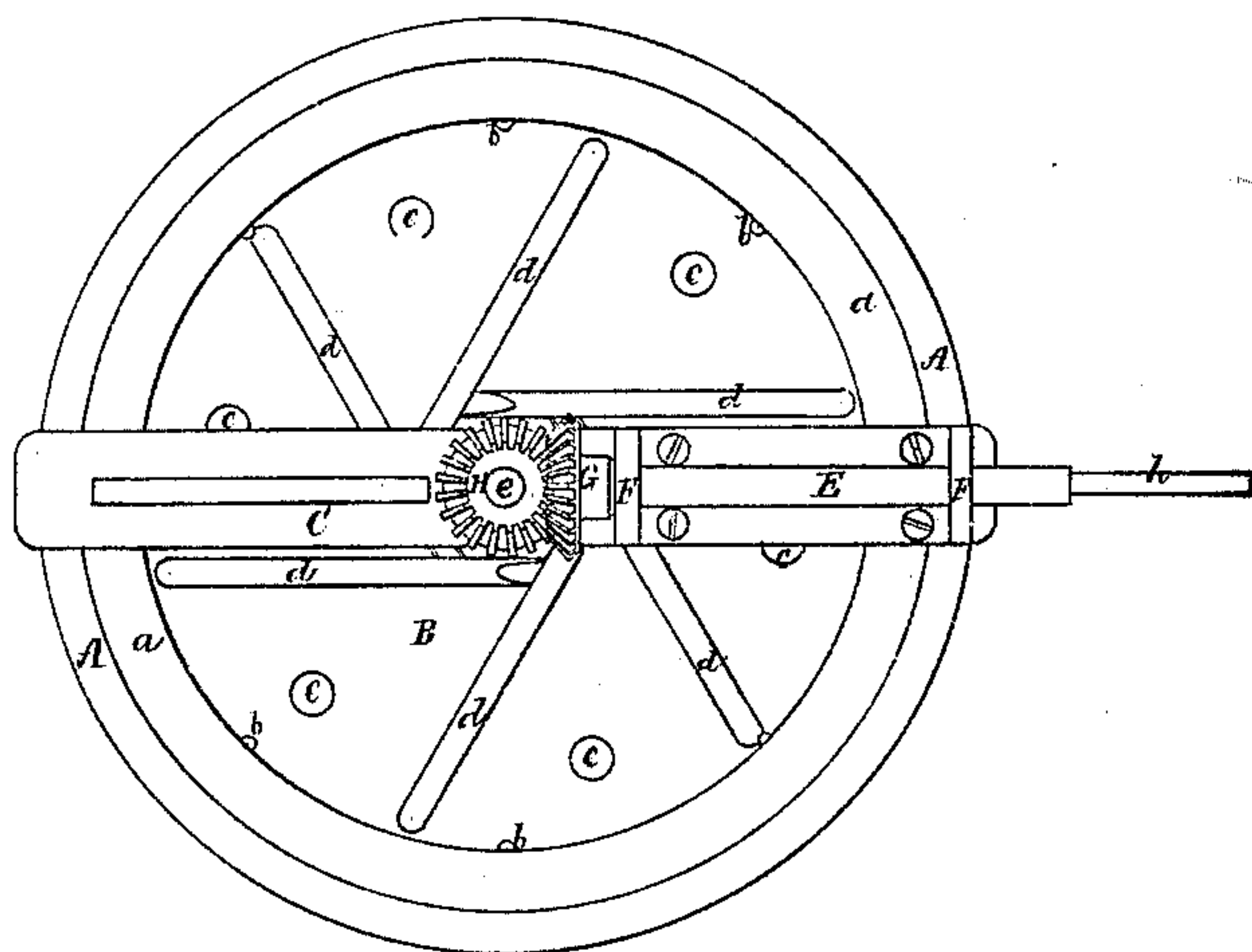


*C. H. Berry,*  
*Washing Mach.*

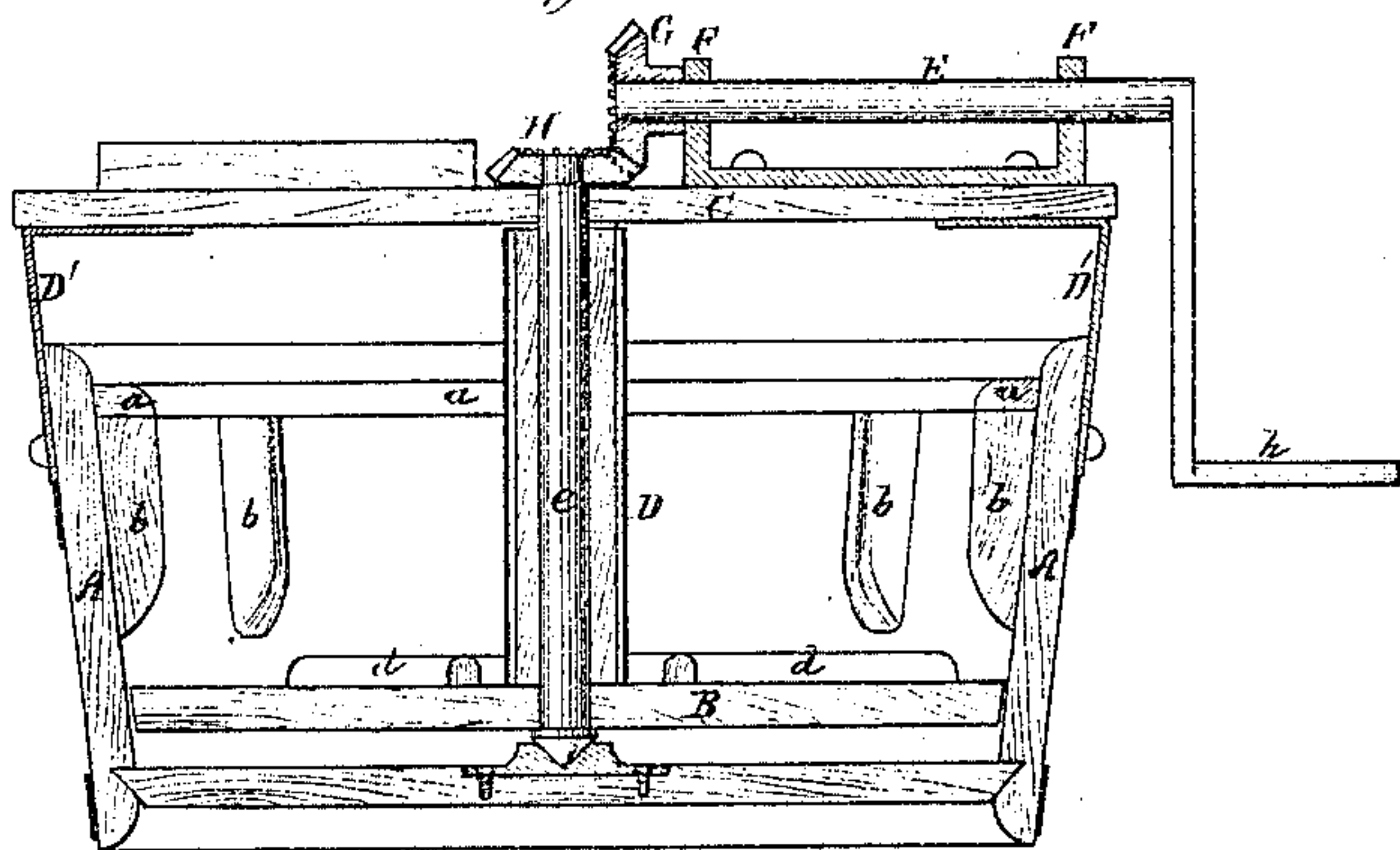
*No. 113,727.*

*Patented Apr. 18, 1871.*

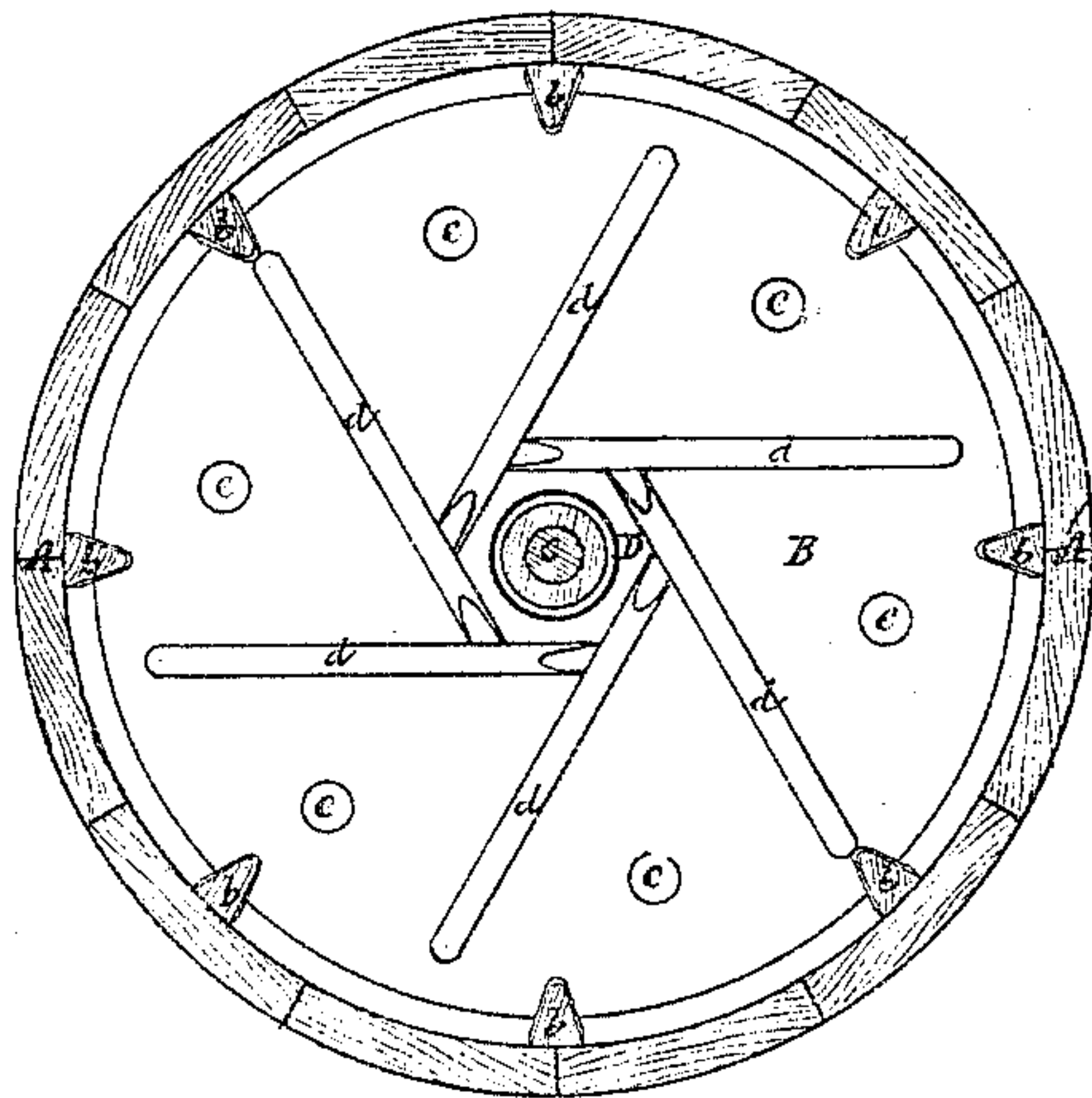
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses.*

*S. N. Piper*

*L. A. Möller*

*Charles H. Berry.*

*by his attorney*

*R. H. Eddy*

# United States Patent Office.

CHARLES HEZLETON BERRY, OF NATICK, MASSACHUSETTS.

Letters Patent No. 113,727, dated April 18, 1871.

## IMPROVEMENT IN WASHING-MACHINES.

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

*To all persons to whom these presents may come :*

Be it known that I, CHARLES HEZLETON BERRY, of Natick, of the county of Middlesex and State of Massachusetts, have invented a new and useful or improved Washing-Machine; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a top view ;

Figure 2, a vertical section ; and

Figure 3, a horizontal section of the said machine.

In the said drawing—

A denotes a wash-tub having a lip, *a*, extended around its inner periphery and near its top, in manner as shown.

From the said lip, at or about at equal distances apart, there extends downward and projects from the inner surface of the tub a series of ribs, *b b b*, each of which is triangular in horizontal section, or has its sides beveled in manner as represented.

Within the said tub is a horizontal disk or dasher, B, perforated with holes, as shown at *c c c*, and provided with a series of cleats, *d d d*, projecting from its upper surface, and arranged tangentially to a common circle concentric with the periphery of such disk, all being as shown.

This dasher is fixed to a vertical shaft, *e*, arranged in the axis of the tub, and supported near its top in a bearing in a bar, C, extended across the tub, and supported at its ends by standards D' D', fastened to the tub.

Encompassing the said shaft, and resting loosely on the dasher, is a tube, D, having a diameter larger than that of the shaft, and being capable of turning around freely on such shaft.

A cranked shaft, E, supported in bearings F F, carries a beveled gear, G, to engage with another such gear H, fixed on the upper end of the dasher-shaft.

By laying hold of and revolving the crank *h* of the shaft E the dasher will be put in revolution within the tub.

In consequence of the tube A arranged in the dasher and around, and to move independently of the dasher-shaft, clothes, while being washed, will not wind on or about the shaft, as they are likely to do without the tube.

Furthermore, while the lip *a* operates to prevent the water from being thrown out of the tub, the triangular ribs operate to prevent it from revolving and piling against the inner circumference of the tub, and enable the dasher to carry the clothes around in the water and whip them against the said ribs, and thereby cleanse them to great advantage.

I would remark that I make no claim in the abstract to the combination of a tub and a cleated and perforated dasher to revolve on such tub, and provided with mechanism for putting it in revolution.

My improved machine has been found, in practice, to operate to excellent advantage, and is not liable to tear and injure clothes, as machines of like nature do when unprovided with the loose tube encompassing the dasher-shaft.

What I claim as my invention in the said washing-machine is as follows :

1. The arrangement and combination of the loose tube D with the dasher, its shaft, and tub, as specified.

2. In the washing-machine, the tub as provided with the lip *d*, or such, and the series of ribs *b*, constructed and arranged in manner as specified.

3. The improved washing-machine as provided with the tube D, the lip *a*, and the ribs *b*, arranged with and applied to its dasher and tub, and constructed substantially in manner and to operate therewith as specified, the dasher having the cleats and perforations and mechanism for putting it in revolution, as explained.

CHARLES HEZLETON BERRY.

Witnesses:

R. H. EDDY,

J. R. SNOW.