

(No Model.)

A. H. BELL & W. L. HESS.
WASHING MACHINE.

No. 256,113.

Patented Apr. 11, 1882.

Fig. 1.

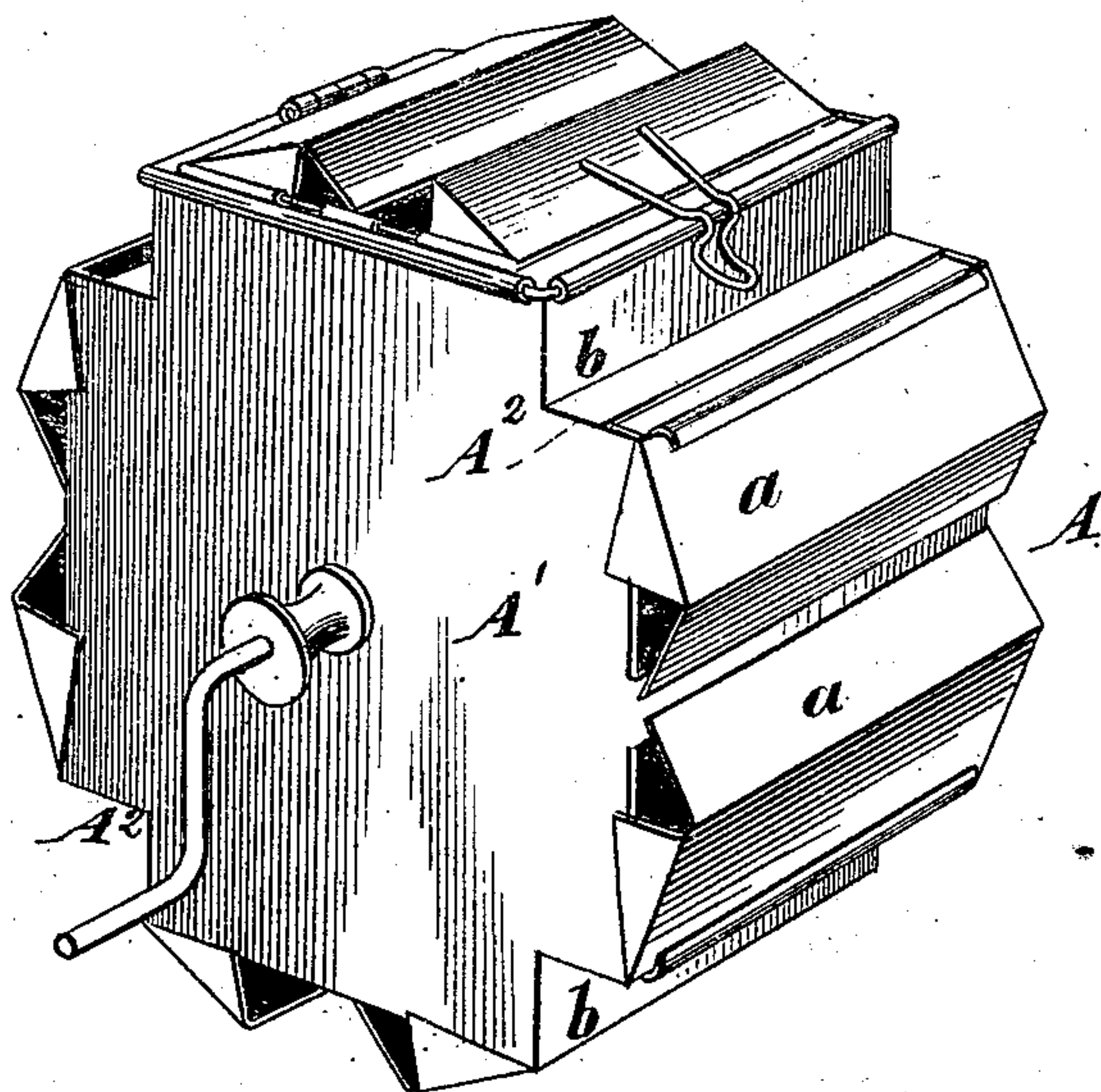
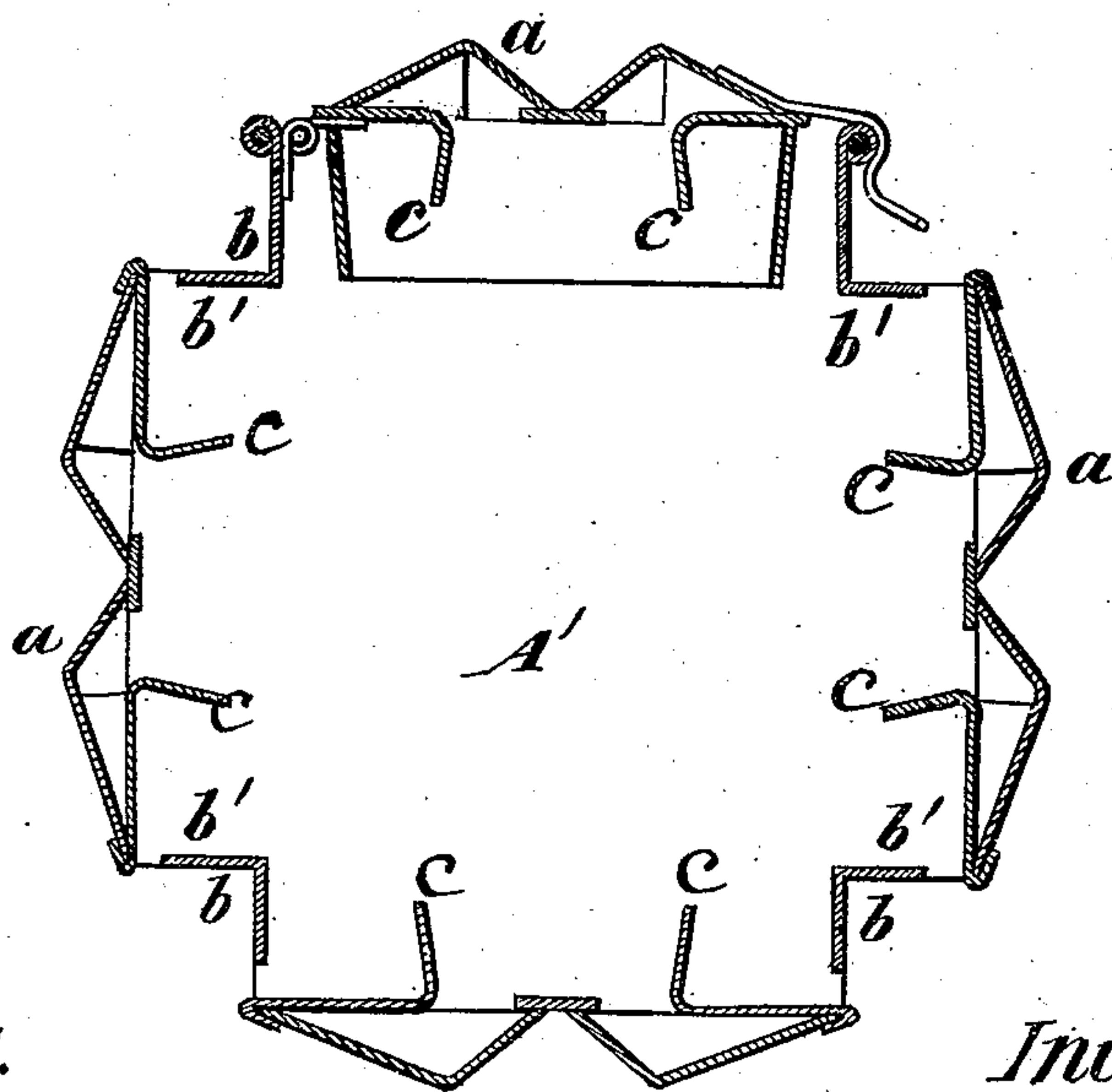


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

AZEL H. BELL AND WILLIAM L. HESS, OF BELLE PLAIN, IOWA.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 256,113, dated April 11, 1882.

Application filed August 16, 1881. (No model.)

To all whom it may concern:

Be it known that we, AZEL H. BELL and WM. L. HESS, citizens of the United States, residing at Belle Plain, in the county of Benton and State of Iowa, have invented certain new and useful Improvements in Washing-Machines; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a side elevation of our improved washing-machine. Fig. 2 is a sectional view thereof.

This invention has relation to washing-machines of that class employing a revolving cylinder hung or journaled in a boiler or vessel containing the water, its object being to facilitate the process of cleansing by keeping the fabrics or articles well exposed to the action of the water and steam; and it consists in the detailed construction and arrangement of its component parts, substantially as hereinafter more fully set forth.

In carrying out our invention we employ, as will be seen by reference to the accompanying drawings, a cylinder, A, provided with peripheral buckets *a*, and adapted to be hung or journaled and revolved in a boiler or vessel constructed preferably after the fashion of the one shown in the Hess and Newton patent, numbered 204,039, and dated May 21, 1878. The buckets pass the water from the boiler into the cylinder upon the fabrics or articles to be cleansed. The ends or heads A' of the cylinder are constructed each in one piece, which makes them stronger and more durable. At each of its four corners each end A' is formed with an angular recess, A², as clearly seen in Fig. 1. Angular pieces or bars *b* connect the heads or ends A' together upon their edges at

their angular recesses A², as seen in sectional view, Fig. 2. Each side of the cylinder is provided with two inwardly-projecting plates, *c*, curved one plate toward the plate next to it on the adjoining side, primarily to form chambers or apartments *b'*, the function of which will appear hereinafter, and, secondly, to adapt the plates or walls *c* to readily pass the fabrics into the chambers, to readily turn them, and to enable the passing of the same into said chambers either when the cylinder is turned to the right or left.

It will be noticed that as the cylinder is revolved at each quarter of a revolution the articles or fabrics will be brought forcibly against the angular bars *b*, and be spread open and turned over in each of the compartments *b'*, formed by the recesses A² and the cross-pieces or bars *b*, and thus be kept continuously and at every point exposed to the action of the heated water and steam. The operation of the cylinder can be reversed, and the same action of the parts upon the articles will follow.

We claim and desire to secure by Letters Patent—

In a washing-machine, the cylinder A, consisting of the ends A', having each an angular recess, A², at each corner, and connected together thereat by the angular bars *b*, having their apices arranged between the inwardly-projecting plates *c* and within the chambers *b'*, the plates secured to the inner sides of the cylinder and curved or bent one toward the plate next to it on the adjoining side, and the buckets *a*, substantially as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

AZEL H. BELL.
WILLIAM L. HESS.

Witnesses:

WM. A. HUNTER,
F. A. LEAVENS.