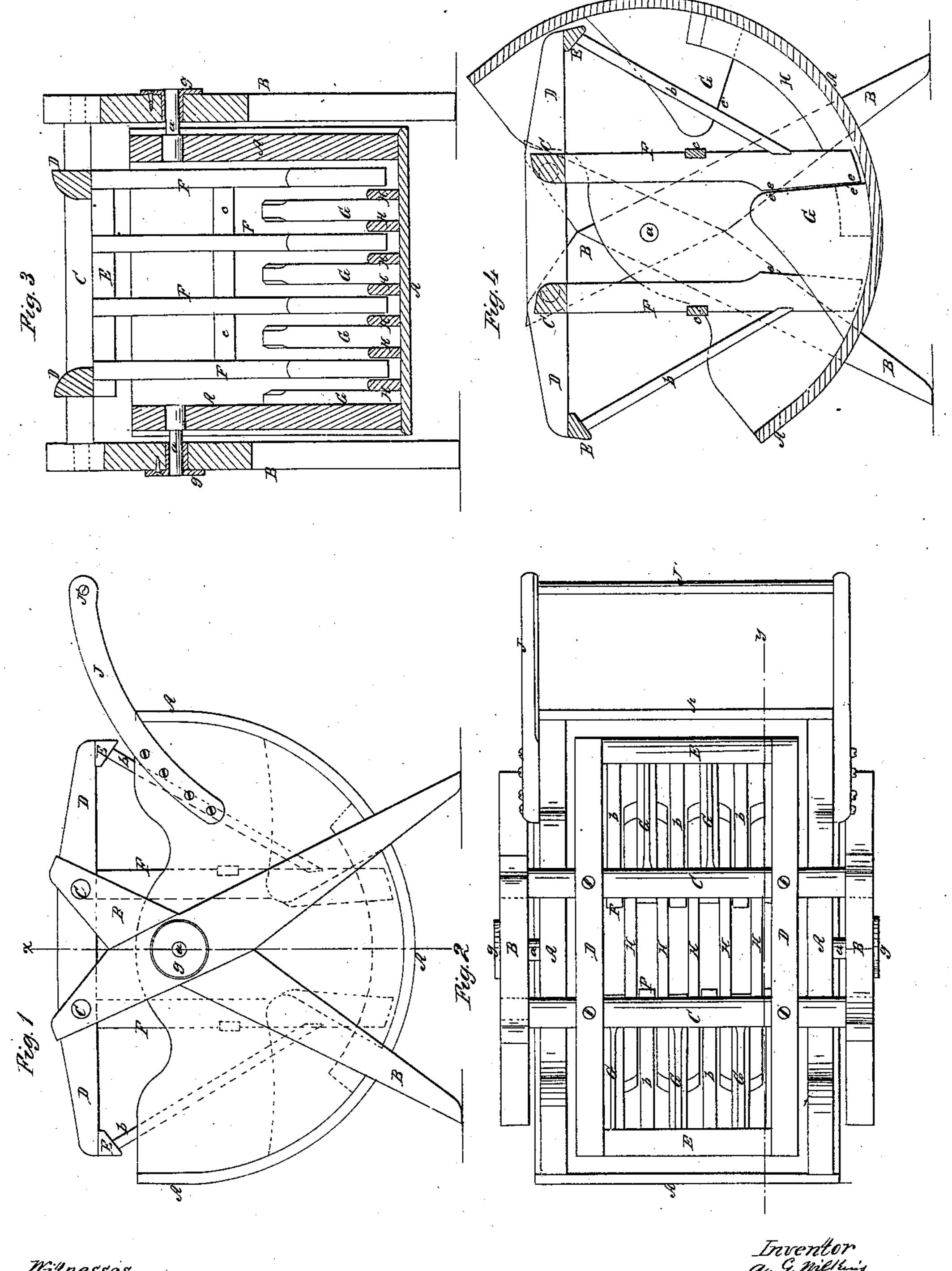
A. Li. Milhins, Mashing Machine,

Nº 81,050,

Patented Aug. 11, 1868.



Wilnesses R. I Campbel J. Campbee Inventor a. G. Williams Macon Finnich Ldamen

## Anited States Patent Pffice.

## A. G. WILKINS, OF COOPERSTOWN, PENNSYLVANIA.

Letters Patent No. 81,050, dated August 11, 1868.

## IMPROVED WASHING-MACHINE.

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

## TO ALL WHOM IT MAY CONCERN:

Be it known that I, A. G. Wilkins, of Cooperstown, in the county of Venango, and State of Pennsylvania, have invented a new and improved Washing-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is an elevation of one side of the improved machine.

Figure 2 is a top view of the same.

Figure 3 is a transverse section, taken in the vertical plane indicated by dotted line x in fig. 1.

Figure 4 is a longitudinal section, taken through the machine in the vertical plane indicated by dotted line y in fig. 2.

Similar letters of reference indicate corresponding parts in the several figures.

The nature of my invention consists in a semicircular wash-tub, which is supported by cross-standards, so that it can be swung freely, and which is provided with two parallel rows of pounders upon its bottom, arranged so that the pounders of one row are opposite the spaces between the pounders of the opposite row; and in combining therewith two parallel rows of stationary arms, arranged so that when the tub is rocked they will be alternately struck by the pounders upon this tub, as will be hereinafter explained.

To enable others skilled in the art to understand my invention, I will describe its construction and operation. In the accompanying drawings, A represents a wash-tub, which consists of vertical sides and a semicircular bottom, put together so as to form a strong vessel for containing water and the articles to be cleansed. This semicircular tub is provided with gudgeons, a a, which enter tubular bearings, g g, in cross-standards BB, and thus allow the tub to be rocked freely about its axial supports. Within the tub, and secured fast to its semicircular bottom, are two rows of triangular beaters, G G, which are arranged in parallel rows on each side of the centre of the tub, and properly spaced, so that the beaters of one row are opposite the spaces between the beaters of the other row. The opposite edges, e, of these beaters G, are in lines radiating from the axis of motion of the tub, so that these edges overhang, and serve as a means for turning the articles which are being cleansed, as will be hereinafter shown.

I also secure upon the bottom of the tub, and to the beaters G G, a number of curved slats, H, which are arranged in parallel planes, and adapted to serve as means for supporting the articles which are being cleansed above the bottom plate of the tub, and thus allowing the articles to be subjected to the most thorough cleansing action between the beaters above described and the edges e e of stationary arms F F. The arms F are arranged in two parallel transverse rows, and are secured at their upper ends to horizontal transverse bars, C C, which are supported by and fastened rigidly to the upper ends of the cross-standards B B, as shown in the drawings.

These arms F are further sustained by means of inclined braces, b b, which are notched into them near their lower extremities, and secured to the transverse bars E E, upon the ends of longitudinal head-pieces D D. The strips C serve as ties for the arms F, to prevent them from spreading laterally.

It will be seen, by reference to the drawings, that the stationary arms of each row are spaced and arranged directly in lines with the beaters G opposite them; and it will be further seen that the acting edges e'e' of the rows of beaters and resisting-arms are inclined at such angles that when the beaters of either one of the rows are brought against the arms of an opposite row of arms, the impinging edges e'e' thereof will be parallel to one another, as shown in fig. 4. It will also be seen that the standards B B are constructed so that they afford independent supports for the rocking-tub and resisting-arms F, that while these standards allow the tub to swing freely, they hold the resisting-arms stationary, and allow the beaters to be alternately brought up against the rows of arms F by rocking the tub.

Articles to be cleansed are put into the tub A, between the rows of beaters and resisting-arms, and lie upon the longitudinal ridges or slats H, so that water can circulate entirely around these articles at all times during the cleansing process. The tub is then grasped by its handles J J', and rocked about its axis, so that at every

i. t stroke the said articles will be compressed and pounded between a row of beaters and resisting-arms, acting upon different parts of the articles at every stroke. After every pounding stroke of the beaters the articles will be caused to turn over, in consequence of the overhanging positions of the acting edges e' e' of the beaters G, and the elevation of the beaters, as they are caused to recede from their respective resisting-arms. This turning or changing of position of the articles in the tub will greatly facilitate the operation of cleansing them, and will allow them to be thoroughly acted upon by the said beaters and resisting-arms.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is-

1. A rocking-tub, A, which is provided with transverse rows of beaters or pounders, G, arranged as described, in combination with the stationary resisting-arms F, arranged in two parallel rows, and adapted to operate substantially as described.

2. Arranging the beaters G G so that their edges e' e' overhang the bottom of the tub at the point where the squeezing of the clothes is performed, in combination with the pendants F F, e e, and the slats H H, substantially in the manner and for the purpose described.

A. G. WILKINS.

Witnesses:

L. W. RANNEY, EDWARD SWEENY.