H. H. HALL.

Dish-Washing Machine.

No. 166,098. Patented July 27, 1875.

Fig 1

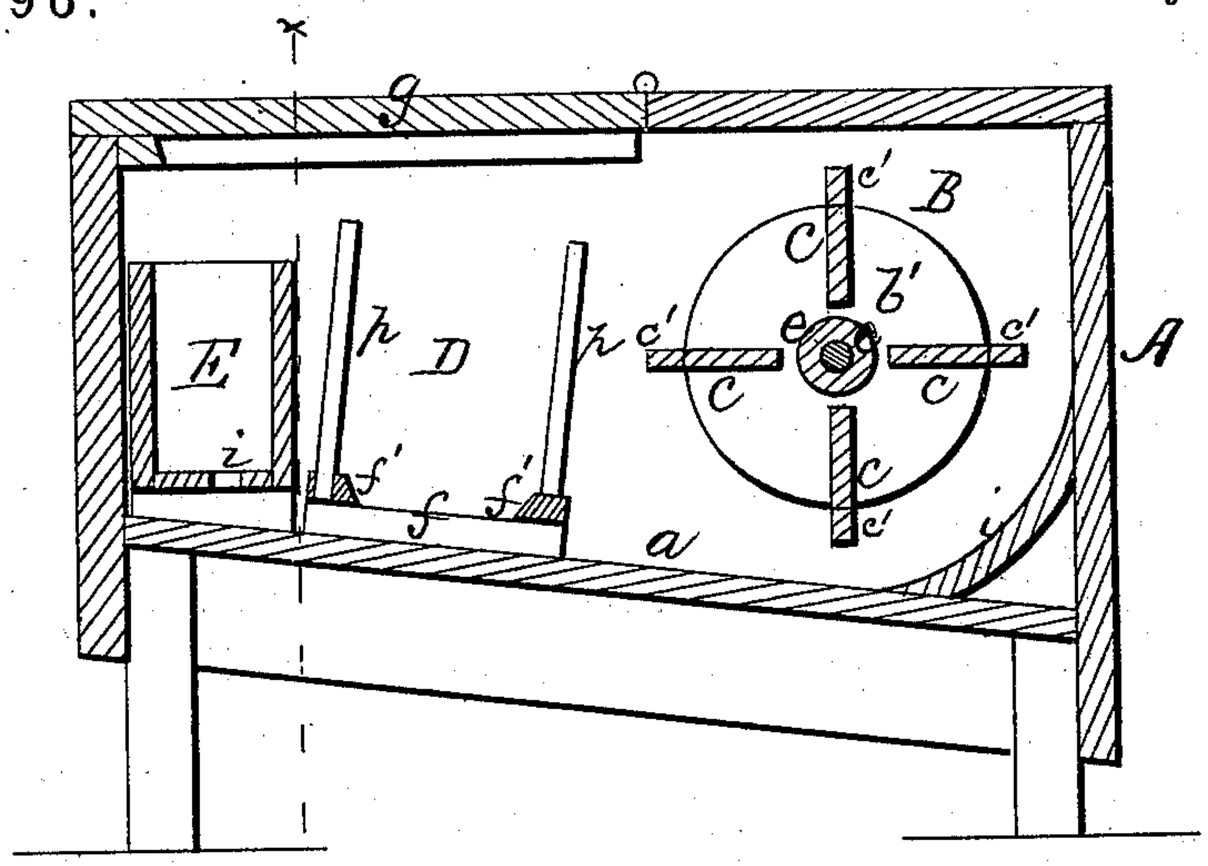


Fig 2

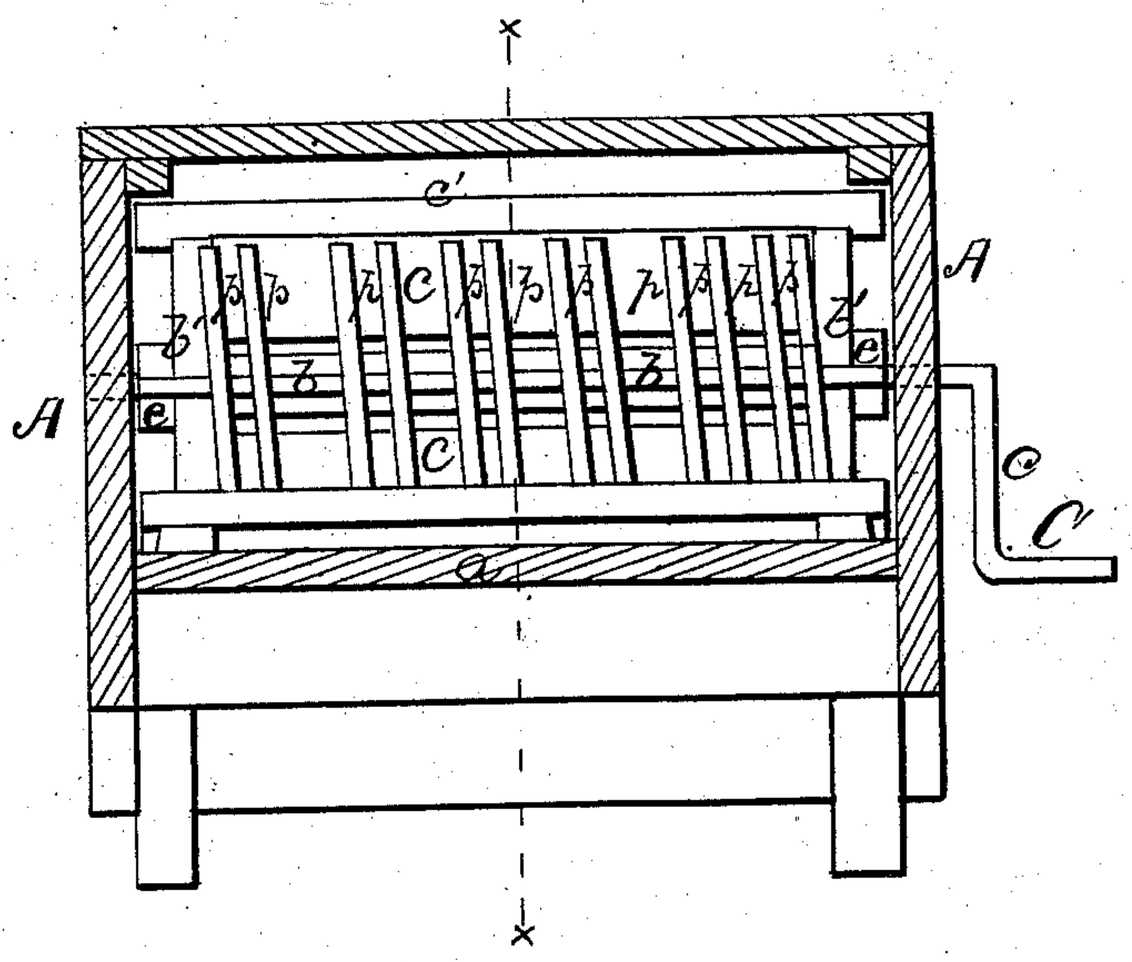
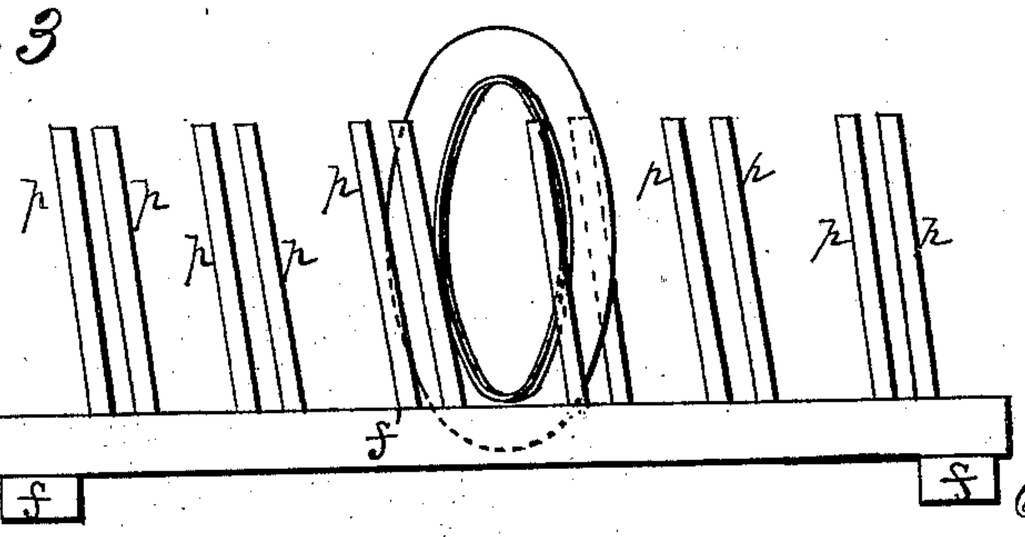


Fig 3



WITNESSES

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HENRY H. HALL, OF TIOGA, PENNSYLVANIA.

IMPROVEMENT IN DISH-WASHING MACHINES.

Specification forming part of Letters Patent No. **166,098**, dated July 27, 1875; application filed November 21, 1874.

To all whom it may concern:

Be it known that I, HENRY H. HALL, of Tioga, in the county of Tioga and State of Pennsylvania, have invented a new and valuable Improvement in Dish-Washing Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a longitudinal vertical section of my dish-washing machine. Fig. 2 is a transverse vertical sectional view of the same. Fig. 3 is a detail view.

This invention has relation to machines for washing dishes in bulk, whereby a great saving in time and labor is obtained; and the nature of the invention consists in the combination, with a dasher-wheel, of a removable rack provided with vertical pins arranged in an inclined position, as will be hereinafter more fully described.

In the annexed drawings, A designates the water-box, having its bottom, *a*, in an inclined position. In the lower end of this box a wheel, B, is placed, rotating in suitable bearings in its vertical sides, which is actuated in small machines by means of a crank-arm, C, upon one end of the horizontally-arranged shaft *b* of the said wheel. This wheel is of the following construction: Two disks, *b'*, are applied, one near each end, to a shaft, *b*, between which are rigidly secured radial buckets *c*, which may be of metal or of wood, and the said disks are further braced by connecting-strips *c'*. D indicates a dish-rack, consisting of a preferably rectangular base, *f f'*, of the same length as the width of the water-box, the longitudinal bars of which are provided with inclined pins or uprights *p*, so arranged that no pin of one bar shall be directly opposite one of the other—that is to say, the vertical plane of each pair of pins on opposite bars shall not be at right angles to the long axis of the base A.

I use my improved dish-washer in the following manner: The plates or dishes are placed in an inclined position in the space between the pins, their obliquity with regard to the long axis of the frame A allowing them to be readily arranged with their dish or concavity turned slightly toward the water-wheel, when, by actuating the crank, hot water will be violently dashed against the "dish" of the articles being cleansed, and between them, returning each time down the inclined bottom of the box or case, within reach of the wheel, to be again forced against the plates until they are thoroughly cleaned, when they may be removed to make room for others.

I also make use of a rectangular box, E, having perforations *i* in its bottom, when cups, knives, and forks, and other small articles of table furniture, are to be washed, the said articles being placed within the box, which is then arranged inside of the case, in a position best suited for receiving within it the strongest current of water.

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

The combination, with the dasher-wheel B, of the removable rack D, having pins *p* arranged in an inclined position, and in a vertical plane oblique to its longer axis, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HENRY H. HALL.

Witnesses:

JOHN W. GUERNSEY,

L. H. TUTTLE.