## Eckerson Grang, Mashing Machine. Patented Jan. 1/862.

N 934/08.

Inventors Witnesses

## UNITED STATES PATENT OFFICE.

ADAM ECKERSON AND J. H. REURY, OF PLEASANT BROOK, NEW YORK.

## WASHING-MACHINE.

Specification of Letters Patent No. 34,108, dated January 7, 1862.

To all whom it may concern:

Be it known that we, Adam Eckerson and Joseph H. Reury, both of Pleasant Brook, in the county of Otsego and State of New York, have invented a new and Improved Washing-Machine; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, is a plan of our improved washing machine, Fig. 2, is a transverse section of the same, taken at the line x, x, of Fig. 1.

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

The object of this invention is to obtain a simple device for facilitating the manual operation of washing clothes. It consists in an arrangement of lever disk rubbing surfaces in a box of semi-circular form whereby the washing can be effected in an easy and expeditious manner.

It also consists in an arrangement of springs and treadle whereby the degree of pressure of the rubbing surfaces upon the clothes can be regulated while in motion to suit the finest or coarsest fabric as hereinafter to be fully explained.

To enable others skilled in the art to fully understand and construct our invention we

will proceed to describe it.

A, represents an oblong wooden box of semi-circular form, supported at its ends upon four legs a, a', which may be of any suitable shape. Passing longitudinally through this box and secured in the ends thereof concident with the concave, is a rod or round bar B, upon which the rubbing disks are journaled and have a vibratory and longitudinally sliding motion.

C, C', are disks of semi-circular form provided on their outer surface with a hub b, and fitted loosely on the round bar B, concentric with the concave of the box. These disks are corrugated on their inner surface and are kept pressed toward each other by spiral spring g, h, which encompass the round bar between the hubs of the disks and

50 their respective ends of the box.

Handles D, attached to the disk by screws or in any suitable manner serve to impart a vibratory motion thereto alternately in

opposite directions.

E, is a treadle located immediately under the box and pivoted at the back side thereof in the legs  $\alpha'$ , and serves by means of its connection with the disks to draw them apart

when it is desired to put in or take out the clothes or to inspect them and to regulate 60 the pressure of the rubbing surfaces of the disks upon them during the process of washing.

The connection of the disks with the treadles consists of two cords c, d, which are 65 attached at one end respectively to the disks C, C', and pass over grooved friction pulleys e, f, at the ends of the box where they

are attached to the treadle. The operation is as follows: The requisite 70 quantity of water being placed in the box and the articles soaped, the disks are spread apart and the spiral springs compressed by a downward pressure of the foot upon the treadle to allow the articles desired to be washed to be 75 placed in the box between the corrugated surfaces of the disks. A vibratory motion being now imparted to the disks by taking hold of the handles and moving them alternately in opposite directions and at the same time 80 the pressure of the foot on the treadle gradually relieved to relax the springs and allow them to move the disks nearer together, the operation of washing is effected expeditiously without danger of injury to the clothes.

The pressure of the rubbing surfaces on the clothes is wholly under the control of the operator and can be adjusted instantaneously to a greater or less degree without requiring to stop the machine.

The within described improvement is simple in its construction, easily operated and is adapted to wash with equal efficiency the finest or coarsest fabric without injury thereto.

Having thus described our invention what we claim as new and desire to secure by Letters Patent, is:

1. The semi-circular disks C, C', having corrugations on their inner faces and fitted 100 loosely on a bar passing and longitudinally through the box, with the handles D, D, the round bar B, spiral springs g, h, and oblong semi-circular box A, when combined arranged and operating as described.

2. The longitudinally sliding disks C, C', round bar B, spiral springs g, h, box H, pulleys e, f, treadle E, and cords c, d, when combined and arranged in the manner and for the purpose set forth.

ADAM ECKERSON. JOSEPH H. REURY.

Witnesses:
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