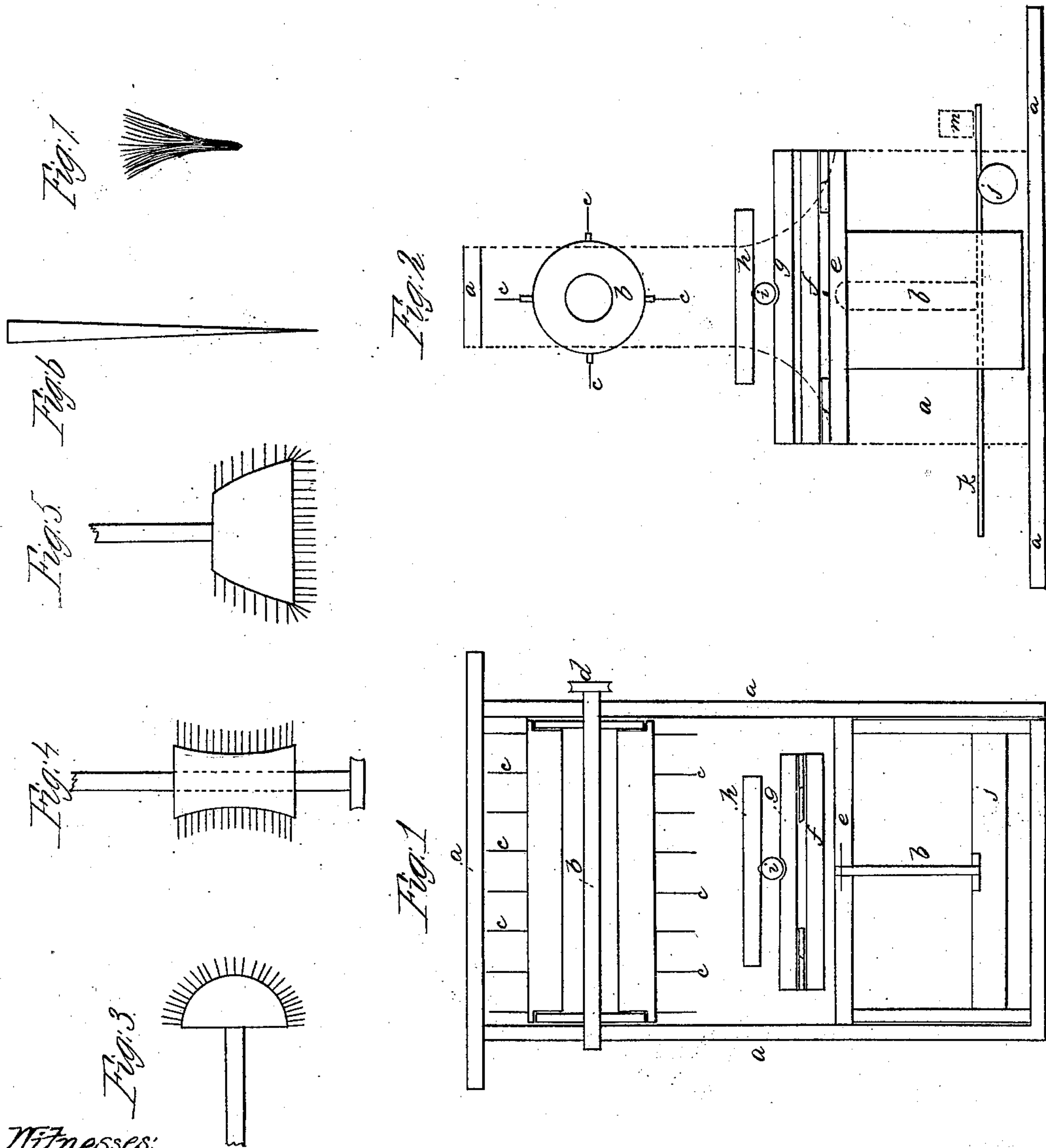


A. Ralston,
Polishing Castings.

N^o 23,193.

Patented Mar. 8, 1859.



Witnesses:
James A. Johnston
John B. Johnston

Inventor
Andrew Ralston

UNITED STATES PATENT OFFICE.

ANDREW RALSTON, OF WEST MIDDLETOWN, PENNSYLVANIA.

CLEANING CASTINGS.

Specification of Letters Patent No. 23,193, dated March 8, 1859.

To all whom it may concern:

Be it known that I, ANDREW RALSTON, of West Middletown, in the county of Washington and State of Pennsylvania, have invented a new and useful Improvement in Machines for Cleaning and Dressing Castings; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, similar letters referring to similar parts.

The nature of my invention consists in a mechanical arrangement for giving to flexible pickers or scrapers for cleaning or "dressing" castings a reciprocating, alternate, or oscillating motion, and also in an arrangement for bringing the castings to be cleaned, in contact with the pickers.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings Figure 1, is a cut or sectional view of the machine. Fig. 2, is a side view. Figs. 3, 4, and 5 are sectional views of drums furnished with flexible pickers which are used for cleaning or "dressing" castings, such as hollow ware, pipes, &c. Figs. 6 and 7 are pickers.

(a) is the frame of the machine, (b) is a drum furnished with flexible pickers (c), (d) is the driving pulley, (e) is the elevating and depressing table, which is moved up and down in slides by means of lever (k), lever (k) is attached to an axle (j), to the lever (k) is attached the connecting rod (l) which is connected with the elevating and depressing table (e). The table (e) is furnished with three leaves (f, g, and h), the leaf (f) rests on table (e) and may be moved sidewise, the leaf (g) rests on leaf (f) and moves backward and forward, and the leaf (h) rests on the ball (i) which is placed in a suitable recess in leaf (g). The weight of the table may be balanced and the castings held up to the pickers by a weight placed on the end of lever (k) as represented at (n) in Fig. 2. The best form for pickers

is that represented in Fig. 6 and should be made thin enough to be flexible; this form of pickers is best adapted for "dressing" flowered or carved castings. For cleaning plain castings steel or other wire may be made in broom form as represented in Fig. 7. The mode of securing the pickers and brushes, wires or brooms, to the drum is left to the judgment of the mechanic as a great variety of devices may be adopted for this purpose. By the reciprocating, alternate or oscillating movement of the drum, the pickers brushes or brooms are kept straight and in their true position. By the arrangement of the table (e) with its leaves (f, g and h) an elevation, depression, side, back and forward movement and any desired inclination of the castings may be obtained, thereby bringing all parts of the casting or castings in contact with the pickers which will remove all the sand and other matter adhering to them.

The operation of my improvement is as follows: The casting is placed on the leaf (h) and by proper movement of lever (k) in connection with the various movements of the leaves (f, g and h) the casting may be adjusted and brought in contact with the pickers or cleaner (c) on drum (b) and by the reciprocating alternate or oscillating movement of the drum the sand and other matter is removed from the casting.

Having thus described the nature, construction, and operation of my improvement what I claim as of my invention and desire to secure by Letters Patent of the United States is:

The combination of flexible pickers, brooms or brushes having a reciprocating, alternate or oscillating movement, with an elevating and depressing table, the whole being arranged, combined and operated as herein described and for the purpose set forth.

ANDREW RALSTON.

Witnesses:

JAMES J. JOHNSTON,
JAS. B. JOHNSTON.