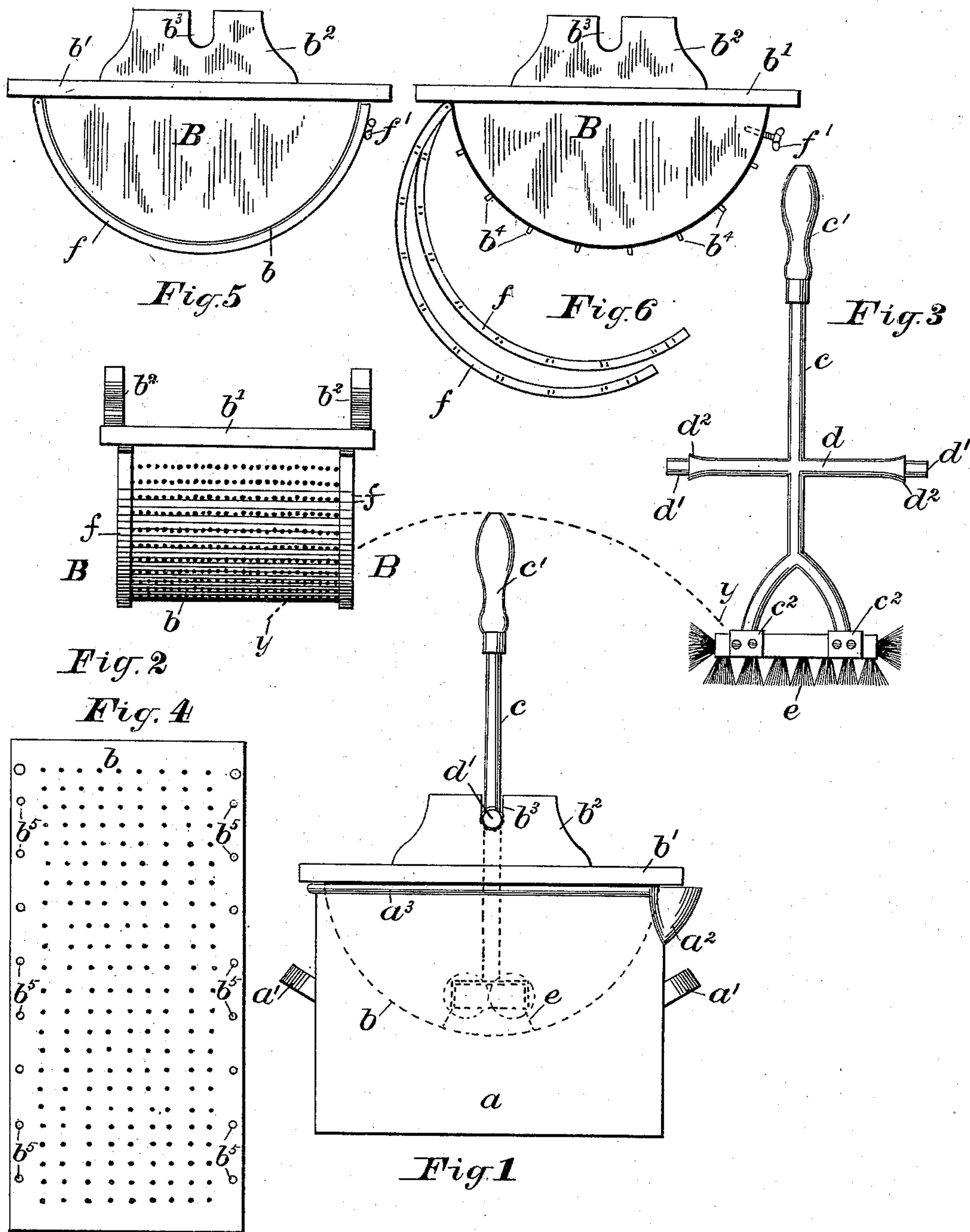


(No Model.)

A. BOSS.
STRAINER.

No. 385,295.

Patented June 26, 1888.



Witnesses;
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per

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UNITED STATES PATENT OFFICE.

ARNOLD BOSS, OF CHICAGO, ILLINOIS.

STRAINER.

SPECIFICATION forming part of Letters Patent No. 385,295, dated June 26, 1888.

Application filed April 19, 1887. Renewed June 4, 1888. Serial No. 275,924. (No model.)

To all whom it may concern:

Be it known that I, ARNOLD BOSS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Strainers, of which the following is a specification.

The object of my invention is to provide a convenient and efficient means for separating the pulp of apples, pumpkins, and other edibles from the cores, seeds, and skins, and the straining of other articles—such as paint and starch, preparing beef tea, &c.; and it consists of a machine having a semi-cylindrical perforated sieve and a lever with brush attached, which is moved by hand over the surface of the sieve, thereby forcing the articles to be strained through the meshes of the sieve, the construction and arrangement of the parts being hereinafter more fully described. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a vertical side view of the entire machine; Fig. 2, a vertical front view of the sieve and sieve-frame; Fig. 3, a detailed view of the lever and brush used; Fig. 4, a detached plan view of the sieve-plate of my machine; Fig. 5, a side view of the sieve-frame and the metallic bands closed. Fig. 6 is a similar view with the bands open, showing the means for holding the sieve-plate; also how other sieves of larger meshes are inserted in the sieve-frame.

Similar letters refer to similar parts throughout the several views.

a is the receiving pan or box, which is quadrilateral in shape and made of any desired material, provided with handles a' a' and a lip or nozzle, a^2 , at one corner for pouring off the strained articles.

$B B$, b' , and $b^2 b^2$ constitute the frame-work of the machine.

b' is a flange or projection that extends over on all sides and rests upon the rim a^3 of the receiving-pan a . On the upper surface and near the outer edges of said flange are two upright bearings, $b^2 b^2$, which support the shaft d . On the under part of said flange b' are two semi-cylindrical upright inclosing-walls, $B B$. On the periphery of said walls are inserted pins b^4 , which hold the screen-plate when in position. Directly under the flange b' , upon one end of the walls $B B$, are hinged two metallic

bands, $f f$, which are bent to fit the periphery of said walls, and, when in position, hold the screen-plate to its place by means of thumb-screws $f' f'$.

b is the perforated sieve or screen-plate, provided with holes b^5 along two of its outer edges, which fit over the pins b^4 of the inclosing-walls B . The screen-plate is thus readily detached from the machine for the purpose of cleaning or replacing it with another of different mesh.

The lever c is an iron or steel rod furnished at one end with a handle, c' , and divided in two parts at the other end, and provided with flanges $c^2 c^2$ on each part. Within said flanges, and fastened by screws or otherwise secured, is the brush e , which is made of steel wire or very stiff bristles, and is formed to fit snugly the entire space between the inclosing-walls. At or about the center of the lever c and forming a part thereof is the shaft d , which stands at right angles from an upright line of said lever, and extends through the machine from side to side to the sockets $b^3 b^3$ of the bearings b^2 . The shaft d is kept from moving out of place sidewise by the flanges $d^2 d^2$.

The operation of my device is as follows: The lever c is first taken out, and the material to be strained is introduced into the machine in as large a charge as can be readily worked without spilling over the edges of the inclosing-walls. The lever c is then placed in position, and the brush e is rubbed against the material by the pressure of the hand on the lever-handle c' , the motion being an oscillating one lengthwise of the machine, the same as indicated by the dotted lines $y y$ of Fig. 1, and in a short time the material will all be passed through the screen into the receiving-pan a , leaving, in the case of fruits, the seeds and skins perfectly clean, which are then dumped out and the machine is ready for use again.

The use my device is mostly adapted for is the pulverizing or reducing of vegetables to a mashed condition, such as split peas, apples, tomatoes, strained boiled meats, and other articles designed for the table in a strained form. These and other articles have heretofore been done by straining through a colander or large sieve, and were pressed through the meshes of the same by the hand or a wooden block.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination of lever *c*, provided with shaft *d*, and the brush *e*, with the holding-frame consisting of side walls, *B*, flange *b'*, and bearing *b*², and the screen *b*.
- 5 2. The combination of the detachable screen *b* with the holding-frame provided with pins *b*⁴, bands *f*, and the screws *f'*.
3. The combination of the oscillating lever

c, provided with shaft *d*, and the brush *e*, with the screen *b*, the holding-frame, and the receiving-pan *a*, having lip *a*².

ARNOLD BOSS.

Witnesses:

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