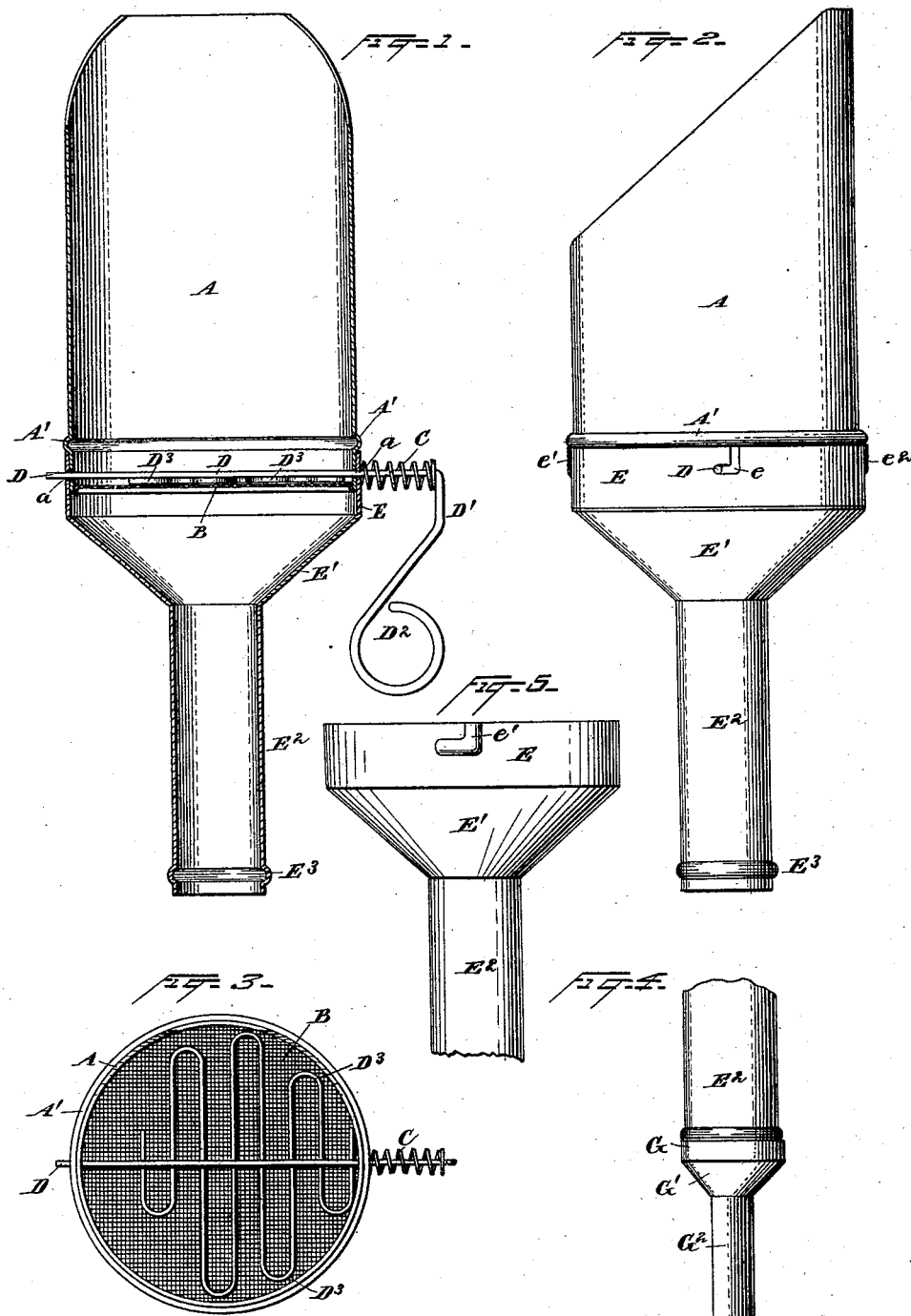


(No Model.)

T. W. GOULD.
FLOUR SCOOP AND SIFTER.

No. 490,766.

Patented Jan. 31, 1893.



Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS W. GOULD, OF PATERSON, NEW JERSEY.

FLOUR SCOOP AND SIFTER.

SPECIFICATION forming part of Letters Patent No. 490,766, dated January 31, 1893.

Application filed December 2, 1891. Serial No. 413,794. (No model.)

To all whom it may concern:

Be it known that I, THOMAS W. GOULD, of Paterson, in the county of Passaic, in the State of New Jersey, have invented a certain new and useful Flour Scoop and Sifter, of which the following is a specification.

The device when used as a sifter gives the finely separated and aerated condition conducive to lightness of bread and cake. The main portion may be of tinned iron, ordinary sheet tin. The agitator may be of iron or steel wire, either bright or tinned, being extended backward and forward across a portion of the sieve in a plane parallel to it, and almost or quite touching it upon the upper side and reciprocated by means of a transverse rod, which is a straight length of a similar wire, or any other straight bar extending out each side through close fitting holes, and provided at one end with an operating handle arranged to be conveniently worked by a portion of the same hand which holds the scoop.

In what I esteem the most complete form of the invention, there is a spiral or other efficient spring urging the agitator to one extreme position, and the force of the hand is applied to urge it to the other extreme position and allow it to return by the force of the spring.

The handle is hollow and may serve as a guiding tube to lead the sifted flour and deposit it at any point desired. The handle may be detached when required.

I provide an attachment to the end of the handle which gives a more contracted aperture. This may be used in sifting flour, but is more especially intended to serve when I use the handle portion as a funnel for liquids. In such case the attachment may lead the liquid into a small-mouthed bottle, or any similar contracted aperture.

The accompanying drawings form a part of this specification and indicate what I consider the best means of carrying out the invention.

Figure 1 is a longitudinal section on the line 1, 1, in Fig. 2. Fig. 2 is a side elevation. Fig. 3 is a plan view. Fig. 4 is an elevation of a portion. Fig. 5 is an elevation of a portion at right angles to Fig. 2.

Similar letters of reference indicate corre-

sponding parts in all the figures where they appear.

A is the body of the scoop.

B is a wire-cloth sieve extending across one end, and strongly and permanently secured by soldering. The other end of the body A is cut obliquely to allow it to serve as a scoop.

D is a straight wire extending through holes *a, a*, in the body near the sieve B, having one end bent at right angles to form an arm D'. The end of this arm is formed into a ring, as indicated by D². Upon this wire within the body A is soldered a serpentine wire D³. The several returns of this wire are so spaced that the device is capable of being moved backward and forward within the body.

Between the arm D' and the body A is interposed a sufficiently long and strong helical spring C which exerts a constant distending force urging the agitator toward one edge of the sieve.

Around the exterior of the body A, a little above the base, is a bead A' which serves as a stop for the inclosing notched band E, *e*, which is matched tightly upon the base of A, but is capable of being removed at will.

E' is a sheet of metal formed into a truncated cone and soldered to the edge of the part E. To the smaller end of this truncated cone is soldered a smaller cylindrical shell E², the lower end of which is open. The notches *e* in the part E receive the wire or rod D and allow the band E and its attachments to be applied to the body A and removed therefrom at will by the application of sufficient force. The notches *e* have each a slight lateral extension of L-shape which allows the parts to be partially revolved by turning the band E and its attachments upon the scoop. These parts should not be subjected to any strain, because it is important to have the rod D subject to as little friction as may be.

I provide two efficient bayonet joints at the points *e'*, *e'* which, when the device is in use, lie respectively on the upper and lower sides thereof. At each of these points the metal of the band E is forced outward by being compressed in suitable dies, or otherwise, making an L-shaped groove on the interior, and the part A is provided with a corresponding pin *a'*, permanently and stoutly set, which when the parts are applied together are re-

ceived in the L-shaped grooves in the band E; and when the parts are sufficiently forced together and slightly revolved, this pin a' , being thereby moved into the angular part, or
 5 L-part of the corresponding grooves e' , e^2 , locks the body of the scoop with its strainer, agitator and means for moving the agitator efficiently to the band E, conical portion E' and handle E^2 . The connection of these parts
 10 must be sufficiently firm to allow the body to be used as a scoop, the operator grasping the part E^2 as a handle for such use.

When it is desired to sift, the device is turned into the perpendicular position, with
 15 the beveled end of the body upward, and the flour being either scooped by itself or poured into it can be sifted by the reciprocation of the rod D and its attached agitator D^2 by operating on the arm D' . This rod may be operated by either hand of the operator. It is
 20 easy to work by a finger of the same hand which holds the device by the handle E^2 .

To use the handle as a funnel for liquids, the body A and its attached rod D, D' , and
 25 agitator D^2 , are removed and placed temporarily out of use. Then the band E, conical portion E' and tubular handle E^2 alone being held in the upright position, the liquid may be poured in at the large mouth presented
 30 at the top, and will be led into a bottle, barrel or other device at the bottom.

G is a cylindrical band capable of fitting tightly upon the lower end of the handle E^2 . A conical extension G' is soldered on the lower
 35 edge of G, and G^2 is a cylindrical or slightly tapered smaller tube soldered to the bottom of the conical part G' . When it is desired to put liquid into a small orifice, as the mouth of a bottle or vial, this contraction G^2 is im-
 40 portant. The contraction G^2 may be used with advantage in some cases in sifting flour, meal, &c. The bead E^3 just sufficiently above the lower end of the handle E^2 serves as an
 45 abutment to receive the upper edge of the band G.

I claim as my invention:—

1. In a combined scoop and sifter, having an agitator and means for operating it, the detachable band E, cone E' and smaller cyl-
 50 inder or tube E^2 , in combination with the body

A and permanently attached sieve B, and bayonet fastenings allowing the detachable portion to serve as a handle when used as a scoop, a guide for the sifted product when used as a sieve, and a funnel for general use
 55 when detached, all substantially as herein specified.

2. In a combined scoop and sifter, the combination with the body A and sieve B and the detachable part E E' E^2 , serving both as a
 60 handle and as a guide for the sifted product of the agitator D^2 composed of a wire or similar metallic part formed in a flat frame lying close to the sieve, and the reciprocating rod D, extending across the body, guided in holes
 65 a , and having an arm D' adapted to be worked by a finger of the same hand which holds the scoop, as herein specified.

3. In a combined scoop and sifter, the detachable part E E' E^2 , serving both as a han-
 70 dle and as a guide for the sifted product the reciprocating rod D, having an arm D' adapted to be worked by a finger of the same hand which holds the scoop, and the agitator D^2 composed of a wire or similar metallic part
 75 formed in a flat frame lying close to the sieve and adapted to be thereby reciprocated, in combination with each other, and with a spring C exerting a constant force urging the agitator into one extreme position, as herein speci-
 80 fied.

4. In a combined scoop and sifter, having an agitator and means for operating it, the detachable band E, cone E' and smaller cyl-
 85 inder or tube E^2 , in combination with the body A and permanently attached sieve B, and bayonet fastenings allowing the detachable portion to serve as a handle when used as a scoop, a guide for the sifted product when used as a sieve, and a funnel for general use
 90 when detached, and with the smaller detachable band G, conical extension G' and tube G^2 , adapted for joint operation as herein specified.

In testimony that I claim the invention above set forth I affix my signature in pres-
 95 ence of two witnesses.

THOMAS W. GOULD.

Witnesses:

THOMAS M. WALSH,
 GEO. C. WALSH.