

(No Model.)

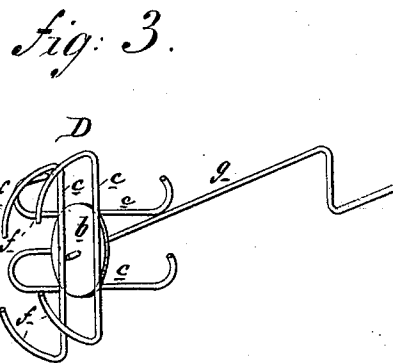
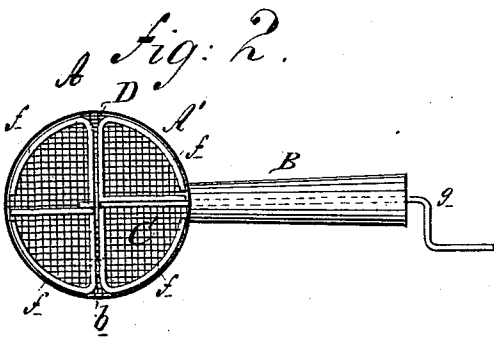
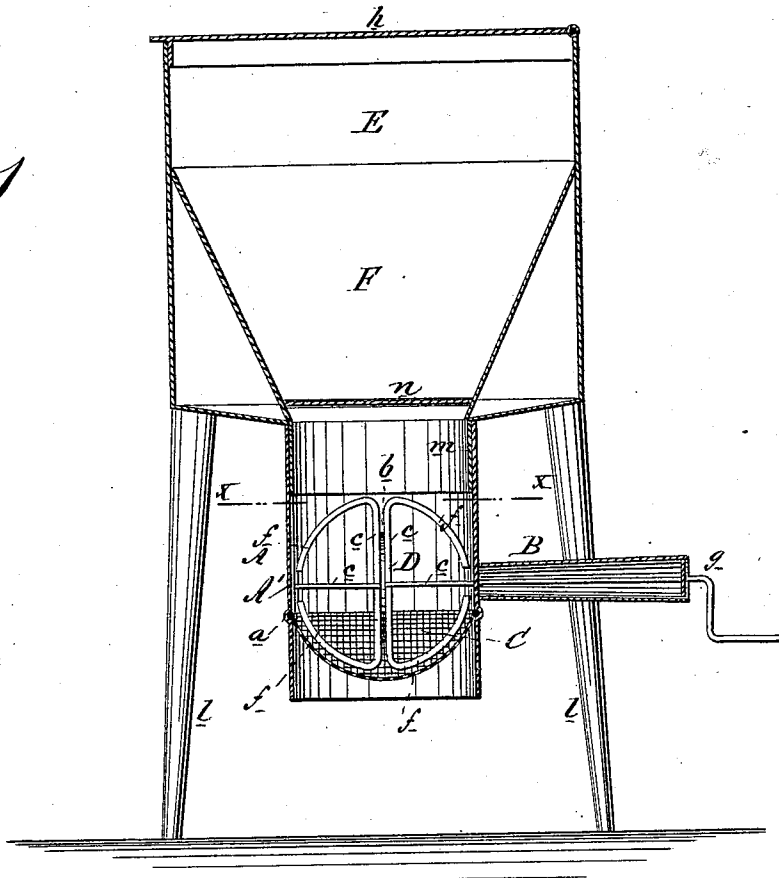
J. C. WALKER & D. NICHOLS.

SIFTER AND STRAINER.

No. 251,078.

Patented Dec. 20, 1881.

Fig 1



WITNESSES:

A. Schehl.
C. Spangwick

INVENTOR:

D. Nichols
J. C. Walker
 BY *Mum & Co*
 ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN C. WALKER AND DAVID NICHOLS, OF KEARNEY, NEBRASKA.

SIFTER AND STRAINER.

SPECIFICATION forming part of Letters Patent No. 251,078, dated December 20, 1881.

Application filed May 25, 1881. (No model.)

To all whom it may concern:

Be it known that we, JOHN C. WALKER and DAVID NICHOLS, of Kearney, in the county of Buffalo and State of Nebraska, have invented a new and Improved Sifter and Strainer, of which the following is a specification.

The object of this invention is to provide an improved device for sifting flour, meal, and like articles, and for straining fruit, jellies, &c.

The invention consists of a cylindrical vessel, open at both ends, having a hollow handle attached at right angles to it, and having a hemispherical sieve held within it in an angular groove formed in said cylinder below the junction of the handle; and it consists, further, of an improved agitator or stirrer, of a general circular shape, having elastic arms, which stirrer is provided with a crank-handle that extends outward through the hollow handle of the device; and it consists, further, of a case or box provided with a hopper having a cut-off, the end of which hopper extends below the box for connection with the sifter, so that the contents of the box and hopper can be discharged at will into said sifter.

Figure 1 is a vertical sectional elevation of the combined sifter and box. Fig. 2 is a plan of the sifter on line *xx*, Fig. 1. Fig. 3 is a perspective view of a modification of the stirrer.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents the sifter or strainer, consisting of a cylinder, A', preferably of sheet metal, open at both ends, and having an annular groove, *a*, formed within it below its center.

B is a hollow tapering handle, rigidly secured to a side of the cylinder A', and communicating with its interior.

C is a hemispherical sieve, fitted in the annular groove *a*, and D is the stirrer, consisting of a disk, *b*, with wires *cc*, secured crosswise on either face of the same and at right angles to each other, there being on each face of the disk *b* two wires, *cc*, whose ends extend beyond said disk *b*, nearly to the diameter of sieve C, and are then curved, with their extremities pointing toward the axis of the disk *b*, so as to form together a stirrer of general spherical outline, with elastic arms *ff*, that will yield when coming in contact with any

hard substance during the sifting operation, and therefore permit said stirrer D to perform its work without stop or hinderance.

Attached to the center of the disk *b*, at right angles to wires *cc*, is a crank-handle, *g*, that extends outward through the handle B, for the operator to take hold of and revolve said stirrer D.

In Fig. 3 is shown a modification of the stirrer D, wherein the two wires *cc* on each face of the disk *b* are fixed parallel with each other; but those on one face are set at right angles to those on the other face of said disk *b*. The general outline of this last stirrer D is the same as the first one, and it operates in the same manner, its arms *ff* being elastic.

E represents a box or case provided with hinged cover *h*, and supported on legs *ll*. Within this box E is secured a hopper, F, whose neck *m* extends down through the bottom of said box E, while just above the neck *m* a slide, *n*, is placed in the said hopper F, whereby the discharge of its contents can be regulated. This box or case E is designed to hold a quantity of flour, meal, or other articles requiring sifting, and the sifter A is designed to be fitted on the neck *m* of the hopper F, for convenience of sifting the contents of said box E as required. This sifter A is designed to be generally used, independently of the box E, for sifting flour, meal, spices, &c., and for straining fruit, pulps, jellies, and the like, the sieve C being removable, so that others of different mesh may be introduced into the cylinder B to suit the article to be sifted or strained.

We are aware that sifters somewhat resembling ours have been used; but we know of none in which the stirrer-arms are elastic and arranged to cover in their revolutions the whole inner surface of the sieve; nor are we aware of any in combination with a chest or box and hopper from which the article to be sifted is automatically fed into the sifter. Hence we do not broadly claim a cylindrical case with sieve and revolving stirrer; but,

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

1. As an improved article of manufacture, a sifter and strainer constructed substantially as herein shown and described, consisting of

cylinder A', provided with internal annular groove, *a*, and hollow handle B, removable spherical sieve C, and stirrer D, provided with curved elastic arms *ff*, arranged as set forth.

5 2. The combination, with the sifter A, of the box or case E, provided with hopper F, having a protruding neck, *m*, and slide *n*, substantially as herein shown and described, whereby material is automatically fed into said sifter,
10 as set forth.

3. In a sifter and strainer, the stirrer D, pro-

vided with curved elastic arms *ff*, substantially as herein shown and described, whereby said stirrer may move without interruption, as set forth.

JOHN C. WALKER.
DAVID NICHOLS.

Witnesses:

ARTHUR BANNING,
ORIS F. WILSON,
LOUIS S. IRVIN,
ISAAC NEFF.