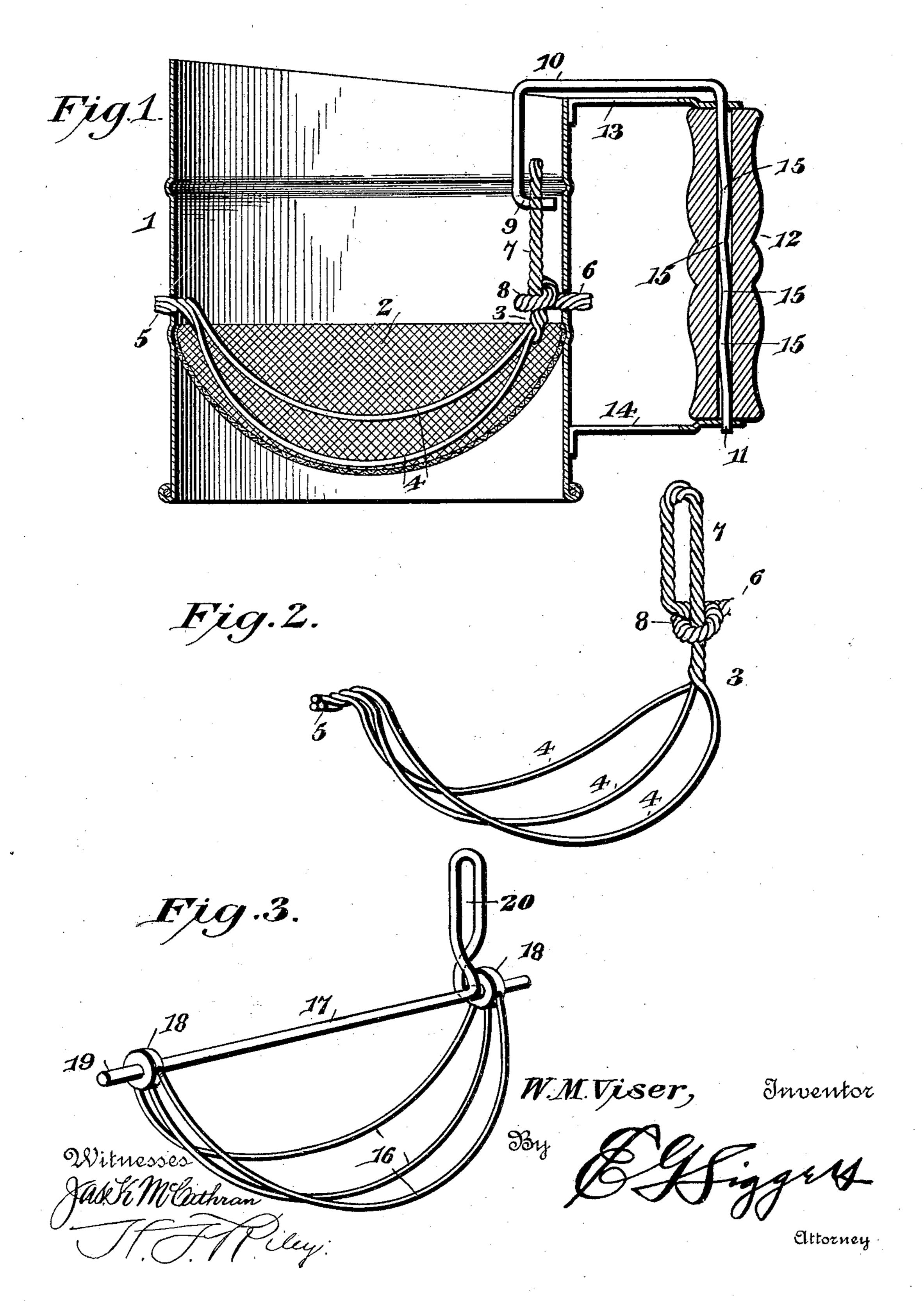
W. M. VISER.

FLOUR SIFTER.

APPLICATION FILED JAN. 29, 1904.



## UNITED STATES PATENT OFFICE.

## WILLIAM MORTIMER VISER, OF HARRODSBURG, KENTUCKY.

## FLOUR-SIFTER.

No. 810,894.

Specification of Letters Patent.

Patented Jan. 23, 1906.

Application filed January 29, 1904. Serial No. 191,214.

To all whom it may concern:

Be it known that I, WILLIAM MORTIMER VISER, a citizen of the United States, residing at Harrodsburg, in the county of Mercer and State of Kentucky, have invented a new and useful Flour-Sifter, of which the following is a specification.

The invention relates to improvements in lour-sifters

flour-sifters.

The object of the present invention is to improve the construction of flour-sifters and to provide a simple, inexpensive, and efficient one of great strength and durability adapted to be positively operated with one hand, thereby leaving the other hand free for stirring, mixing, kneading, or the like.

A further object of the invention is to provide a flour-sifter having a vibrating agitator adapted to effect the operation of sifting without throwing the flour out of the top of the sifter and capable of yieldably engaging the sieve to reduce the wear on the same and to prevent extraneous material from being forced

through the sieve.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion, size, and minor details of construction within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a vertical sectional view of a flour-sifter constructed in accordance with this invention. Fig. 2 is a detail perspective view of the agitator. Fig. 3 4° is a similar view illustrating a modification of

the invention.

Like numerals of reference designate corresponding parts in all the figures of the draw-

ings.

open at the top and bottom and preferably in the form of a scoop, as shown, and provided at its lower portion with a sieve 2, constructed of wire-gauze or other suitable material.

The sieve, which is approximately semispherical, is secured at its edges to the body or receptacle by any suitable means, and the body or receptacle is preferably provided with an annular groove to receive the attached portion of the sieve.

The flour is forced through the sieve by I

means of a vibrating agitator 3, consisting of a plurality of curved wires 4, spaced apart between their ends and curved to conform to the configuration of the sieve. The wires are 60 converged at their ends and are twisted together to form opposite journals 5 and 6, which are round, as shown, and which are arranged in suitable bearing-openings of the sides of the body or receptacle. The oppo- 65 site openings of the body 1 are preferably slightly larger than the journals to permit the agitator to yieldably engage the sieve, thereby reducing the wear upon the same. The agitator is vibrated and moved back and forth 70 across the sieve, whereby flour may be rapidly sifted without throwing the same out of the top of the sifter. Also as the agitator moves or vibrates at the bottom of the flour there is no liability of forcing through the 75 sifter any flies or other insects, as the wires of the agitator are separated from the sieve by a slight space.

The twisted wire at the journal 6 is extended to form an upright loop 7, the twisted wire 80 being preferably extended vertically from the adjacent ends of the wires 4 and then bent downwardly, as shown, and coiled at 8 around the upwardly-extending portion at the inner end of the journal 6. The upwardly-extend- 85 ing loop is engaged by a lower angularly-bent end or finger 9 of an approximately L-shaped arm 10 of a shaft or spindle 11, which passes through a wood handle 12. The handle, which is arranged in an upright position at one side 90 of the body 1, is located between a pair of upper and lower brackets or arms 13 and 14, suitably secured at their inner ends to the exterior of the body 1, as clearly illustrated in Fig. 1 of the drawings, and provided at their 95 outer portions with alined perforations for the reception of the shaft or spindle 11. The handle is provided with a longitudinal opening, and the shaft or spindle, which is of less diameter than the longitudinal opening, is pro- 100 vided with bends or corrugations 15, whereby it is adapted when driven into the handle to frictionally engage the opposite walls of the longitudinal opening. By this construction the handle and the shaft or spindle are rigidly 105 connected together.

The L-shaped arm 10 extends inward from the upper end of the shaft or spindle to the receptacle and then downward within the same, the finger or end 9 being extended from the 110 depending portion of the arm and passing through the upwardly-extending loop 7 of the agitator. The loop 7 of the agitator is located above the pivot or journal 6, and when the handle is partially rotated the depending portion of the arm 10 is oscillated, thereby swinging the upwardly-extending loop and vibrating the agitator. The sifter is operated by grasping the handle with one hand and swinging the body backward and forward with a more or less quick motion. The sifter may be operated in this manner by one hand, thereby leaving the other hand free for stirring, mixing, kneading, or the like.

In Fig. 3 of the drawings is illustrated a modification of the agitator in which the wires 16 of the agitator are secured at their ends to a transverse shaft 17 by means of collars 18. The shaft, which is extended beyond the collars to provide journals 19, is extended upward adjacent to one of the collars and bent to form a loop 20, the wire or other material of the loop being twisted at the base of the

same, as shown.

The arm of the shaft may, if desired, be arranged at the lower end of the handle and operate at the bottom of the sifter.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. A sifter, comprising a body having bear30 ings, a handle having an opening, an agitator, and a shaft journaled in the said bearings and provided with means for connecting it to the agitator, and having a portion extending through the handle and of less diameter than the opening of the same, said portion being

bent or corrugated for engaging the walls of the opening, substantially as described.

2. A sifter provided with an agitator composed of a plurality of wires spaced apart at their intermediate portions, and having their 40 end portions twisted together and extended to form opposite journals, and means for operating the agitator, substantially as described.

3. A sifter, comprising a body, a sieve, an agitator mounted on the body, and having a 45 projecting loop, a handle mounted on the exterior of the body, and having a longitudinal bore, and a shaft provided with corrugated or bent portions passing through the bore of the handle and frictionally engaging the latter, 5° said shaft being also provided with an arm engaging the loop of the agitator, substantially as described.

4. A sifter provided with an agitator composed of a plurality of wires spaced apart at 55 their intermediate portions, and having their end portions twisted together to form projecting journals, the twisted wires of one of the journals being extended and doubled to form an approximately vertical loop, and 60 operating mechanism provided with means for engaging the loop, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

the presence of two witnesses.

## WILLIAM MORTIMER VISER.

Witnesses:

Ed. Krokan, C. E. Rankin.