R. L. LYNCH.

MILK STRAINER.

APPLICATION FILED APR. 15, 1912.

1,032,917. Patented July 16, 1912.

Fig. 1.

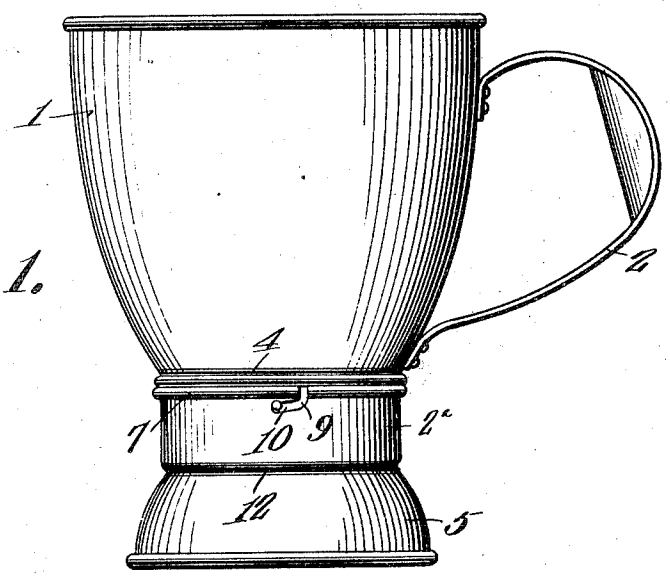


Fig. 2.

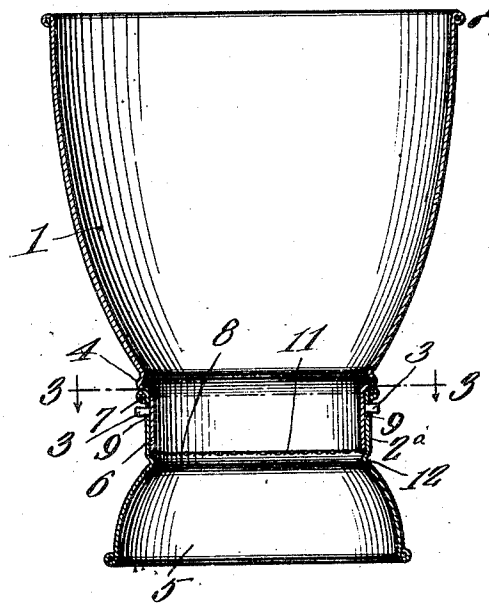
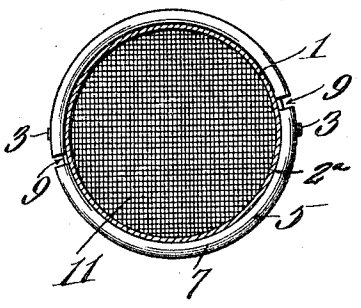


Fig. 3.



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UNITED STATES PATENT OFFICE.

ROBERT L. LYNCH, OF CAMPBELLSBURG, KENTUCKY.

MILK-STRAINER.

1,032,917. Specification of Letters Patent. Patented July 16, 1912.

Application filed April 15, 1912. Serial No. 690,911.

To all whom it may concern:

Be it known that I, ROBERT L. LYNCH, a citizen of the United States, residing at Campbellsburg, in the county of Henry and State of Kentucky, have invented a new and useful Milk-Strainer, of which the following is a specification.

The device forming the subject-matter of this application is adapted to be employed for straining milk and the like into bottles and similar receptacles.

One object of the present invention is to provide a device of this type comprising funnel-shaped elements, one of which is adapted to receive the liquid, and the other of which is adapted to receive the upper end of the receptacle to be filled, novel means being provided for operatively connecting these parts.

A further object of the invention is to provide a device of this type comprising separable parts having interlocking means for preventing relative movement between said parts, the parts being provided with means to hold a screen.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings,—Figure 1 shows the invention in side elevation; Fig. 2 is a longitudinal section; and Fig. 3 is a transverse section upon the line 3—3 of Fig. 2.

In carrying out the invention there is provided a primary funnel-shaped member 1 which may be equipped at one side with a handle 2. The primary funnel-shaped member 1 terminates in a cylindrical part 2^a, from which project pins 3. At the line of juncture between the cylindrical part 2^a and the body portion of the member 1 there is an external bead or shoulder denoted by the reference character 4. The invention further includes a secondary funnel-shaped member 5, provided with a cylindrical portion 6 at the extremity of which is an outstanding bead 7. At the line of juncture between the cylindrical portion 6 and the body portion of the member 5 there is an internal bead or shoulder denoted by the reference character 8. In the upper edge of the cylindrical portion 6 of the secondary funnel-shaped member 5 there are bayonet slots 9 adapted to receive the pins 3. The transverse branches 10 of the bayonet slots 9 are inclined with respect to the axis of the device, for a purpose which will be set forth hereinafter. A screen 11 is placed upon the shoulder 8 of the member 5 and the cylindrical portion 2^a of the member 1 is placed within the cylindrical portion 6 of the member 5, the screen 11 being bound between the lower edge of the cylindrical portion 2^a and the internal shoulder 8. The external shoulder 4 of the member 1 bears against the bead 7 of the member 5. When the pins 3 are inserted into the bayonet slots 9, and when relative rotatory movement takes place between the parts 1 and 5, the pins 3 will ride into the inclined transverse branches 10 of the bayonet slots 9 and force the parts 2^a and 6 into telescoped relation, so that the screen 11 will be bound forcibly between the lower end of the part 2^a and the shoulder 8 of the part 5. At the same time, the external shoulder 4 of the part 1 will be crowded down upon the bead 7 which is formed at the upper edge of the part 6. Owing to the fact that the shoulder 4 engages with the bead 7 when the screen 11 is bound between the lower edge of the part 2 and the shoulder 8, the part 2^a will be prevented from moving downwardly in the part 6 to too great an extent, thereby crowding the screen 11 downwardly off the shoulder 8. It is to be noted that the bead 7 of the part 6 overhangs the transverse branch 10 of the bayonet slot 9, and consequently the bayonet slot is reinforced to withstand the strain imposed thereon by the pin 3. It will be understood readily that any desired number of bayonet slots 9 and pins 3 may be provided.

The funnel-shaped parts 1 and 5 flare in opposite directions, the part 1 being wider than is the part 5 at its mouth. The part 1 is well adapted to receive the milk or other liquid, and the part 5 is adapted to fit over the neck of the bottle or other receptacle which is to be filled. Owing to the flaring form of the part 5, the same may be wedged down tightly upon the neck of the bottle, thereby preventing a leakage of the milk or other liquid which passes through the screen 11. The part 5 constitutes a base upon which the device is adapted to rest when not

in use, and the handle 2 may be employed as a lever for causing a forcible relative rotation between the parts 1 and 5, whereby the pin 3 may be wedged forcibly in the transverse branch 10 of the bayonet slot 9, for the purpose hereinbefore set forth. Owing to the fact that the members 1 and 5 flare at different angles, it is possible to invert the device from the position shown in Fig. 2, and to place the part 1 over the neck of the bottle, should the neck of the bottle be too large to fit in the part 5, the part 5 under such circumstances constituting a receptacle adapted to receive the milk before the same passes through the screen 11 into the part 1 and thence into the receptacle. It is to be noted that the part 5 is of such a diameter that it may be placed within the part 1, thus facilitating the shipping of the device and permitting the same to be disposed in relatively small compass. In forming the shoulder 8 in the part 5, a groove 12 is fashioned in the outer face of the part 5, the groove 12 being adapted to receive a cord (not shown), the extremity of which may be connected to the handle 2 when it is desired to unite the parts 1 and 5 in such a manner that one of them cannot be lost.

Having thus described the invention, what is claimed is:—

1. In a device of the class described, a pair of funnel-shaped members flaring in opposite directions and provided with telescoped cylindrical portions, the outer of said cylindrical portions being provided with a shoulder; a screen resting upon the shoulder and held thereagainst by the other of the cylindrical portions; and interlocking elements upon the cylindrical portions.

2. In a device of the class described, a pair of funnel-shaped primary and secondary members flaring in opposite directions, the primary member being of greater diameter at its wider end than the wider end of the secondary member, the members having cylindrical telescoped parts, the cylindrical part of the primary member fitting within the cylindrical part of the secondary member and having an external shoulder adapted to engage the upper edge of the cylindrical part of the secondary member, the cylindrical part of the secondary member being provided with an internal shoulder; a screen located between the inner end of the cylindrical part of the primary member and the internal shoulder of the secondary member; and interengaging elements upon the cylindrical parts adapted to bind the screen between the internal shoulder of the secondary member and the inner end of the primary member and to force the external shoulder of the primary member against the upper edge of the cylindrical part of the secondary member.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ROBERT L. LYNCH.

Witnesses:
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