W. R. NICOLL.

COMBINED FAUCET AND STRAINER.

APPLICATION FILED MAY 7, 1915.

1,275,463.

Patented Aug. 13, 1918.

Fig. 1.

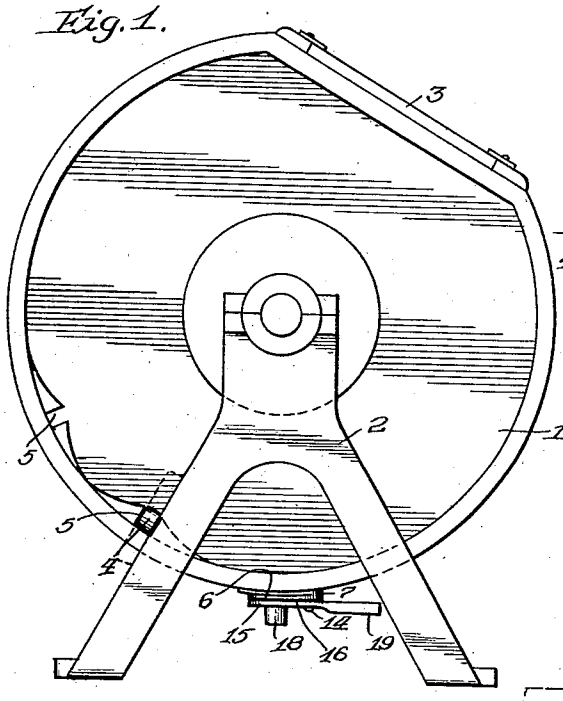


Fig. 3.

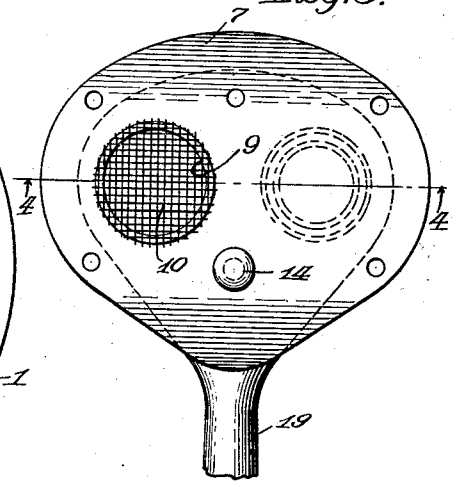


Fig. 4

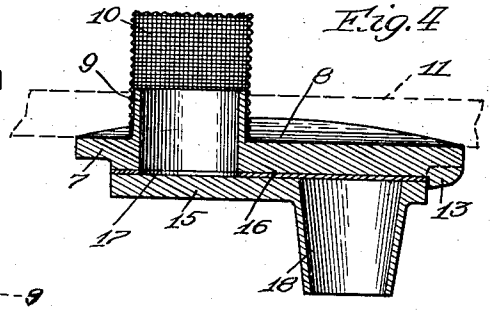


Fig. 2.

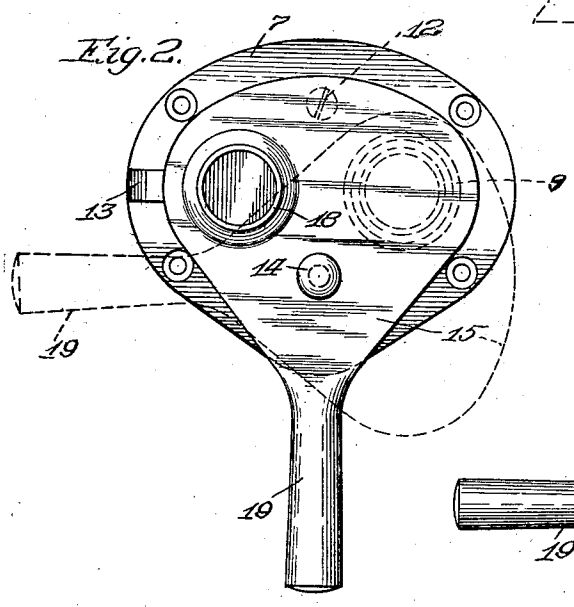
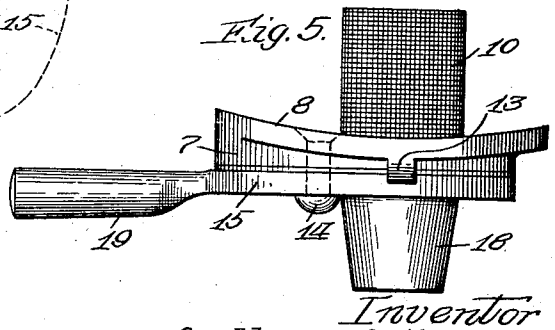


Fig. 5.



Witness:

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COMBINED FAUCET AND STRAINER.

1,275,463. Specification of Letters Patent. Patented Aug. 13, 1918.

Application filed May 7, 1915. Serial No. 26,465.

To all whom it may concern:

Be it known that I, WILLIAM R. NICOLL, a citizen of the United States, residing at Owatonna, county of Steele, and State of Minnesota, have invented certain new and useful Improvements in Combined Faucets and Strainers, of which the following is a specification.

This invention has for its principal object to provide an improved combination faucet and strainer especially adapted for use in connection with combined churns and butter-workers, but having a more general application to vats, receptacles, tanks, and the like.

The invention consists in the novel construction, combination and arrangement of the several parts.

In the accompanying drawing—

Figure 1 is a side elevation of a combined churn and butter-worker to which a combined strainer and faucet, constructed in accordance with the principles of this invention, is applied.

Fig. 2 is a view of the combined strainer and faucet.

Fig. 3 is a view of the under side of the same.

Fig. 4 is a sectional view taken on line 4—4 of Fig. 3; and

Fig. 5 is a side elevation of the combined strainer and faucet.

It is found in practice, that when a combined strainer and faucet of the type usually employed is attached at the end of the drum of a butter-working machine, it is difficult, if not impossible, to drain all of the liquid from the drum. One of the principal objects of the present invention is to overcome this difficulty by providing a combined strainer and faucet which is applied to the outside or curved surface of the drum and from which every particle of the liquid can be drained by turning the drum so that the faucet is at the lowermost point.

In the drawing, the reference numeral 1 designates generally the drum of a butter-working machine, preferably circular in cross section, and mounted in standards 2 for rotation about a horizontal axis. A door 3 is provided, preferably extending the full length of the drum, through which access may be had to the interior thereof. Pivotally mounted on one of the standards 2 is a latch 4, which may be rotated from the dotted position to engage notches 5 formed at the end of the drum, for holding the drum stationary in any one of several positions.

In one of the fixed positions of the drum, preferably that shown in Fig. 1, the door 3 is inclined from the horizontal and a combined strainer and faucet designated generally by the reference numeral 6, is so located on the exterior or curved surface of the drum that with the door in the position shown, the combined strainer and faucet will be at the lowermost point of the drum.

This combined strainer and faucet 6 comprises a plate 7 formed on one side with a curved surface 8 conforming to the curvature or other surface of the drum to which it is to be applied, and from this surface projects a hub 9 substantially the height of the thickness of the drum to which the device is applied. Secured to the hub 9 and adapted to project inwardly in the drum to which the device is applied, is a strainer 10 which is preferably secured to the hub in any suitable manner as, for example, by soldering it thereto. As illustrated by the broken dotted lines 11 in Fig. 4, the hub 9 is intended to extend just through the material of the drum, represented by the outlines 11, with the strainer 10 projecting inwardly therefrom so that any liquid within the drum may pass through the strainer and through the hub 9 when desired. The plate 7 is secured to the outside of the drum in any suitable manner, as, for example, by means of screws 12. Formed integral with the outer surface of the plate, is a lug 13 which constitutes a stop for the faucet.

Pivoted to the plate 7 by means of a bolt 14, which is preferably inserted through the plate from the underside thereof before it is applied to the drum, is a plate 15, preferably of the same material of which the plate 7 is made, and interposed between the plates 7 and 15 is a sheet 16 of softer material, which is secured to the plate 7. This sheet 16 has a perforation 17 which corresponds to the perforation of the hub 9, and formed integral with the plate 15 is a nozzle 18 which is adapted to be moved to register with the hole 17 and the opening in the hub 9. For convenience in rotating the plate 15, a handle 19 is provided and it will be noted that the nozzle 18 of the pivoted plate 15 is so disposed that when

the plate 15 abuts the stop 13 on the plate 7, the nozzle 18 does not register with the hole in the plate 7, and the handle 19 must be moved to the dotted position shown in Fig. 2 to make the holes in the plates register so that liquid can be discharged therefrom.

The plates 7 and 15 are usually cast iron and if placed directly in contact with each other would soon become worn so that liquid would escape between them, and for this reason the sheet 16 of softer material, usually zinc or the like, is interposed between them in order to make a tight joint and prevent leaking, and to prevent plates from being unduly worn.

In the use of the device in connection with a combined churn and butter-worker, the combined churn and butter-worker is held as previously explained, and in order to draw off the butter-milk or any other liquid, the handle 19 is operated to bring the nozzle 18 in register with the hole in the plate 7. The particles of butter are held from escaping by the screen 10.

What I claim is:

1. The combination with a receptacle having a surface curved about a horizontal axis; of a combined strainer and faucet comprising a plate fixed to the receptacle having one side curved to conform to the outside thereof and with a perforated hub extending from this side of the plate through the wall of the receptacle and terminating flush with the inside thereof, and having a flat outer side; a strainer attached to the outside of the hub and extending within the receptacle; and a handled plate flat on one side eccentrically pivoted to the outside of the other plate with an integral perforated hub extending from the other side and rotatable to register with the perforation of the other hub.

2. The combination with a cylindrical receptacle having a door in its curved surface, of a standard for supporting the receptacle upon a horizontal axis, means in connection with the standard to engage and hold the receptacle in any one of a plurality of fixed positions, a combined strainer and faucet comprising a plate conforming to the outer curved surface of the receptacle with a perforated projection extending therefrom through the wall and flush with the inside thereof, and a handled plate eccentrically pivoted to the outside of the first-named plate with an integral perforated hub extending outwardly therefrom and rotatable to register with the perforation of the projection of the first-mentioned plate, the strainer and faucet being located in such a position that the said door will be at the top slightly inclined to the horizontal when the strainer and faucet is held in one position at the lowermost point by said holding means so that the handle of said handled plate can be operated from the same side of the receptacle as that upon which the door is located to completely drain the receptacle.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 3rd day of May A. D. 1915.

WILLIAM R. NICOLL.

Witnesses:
A. A. SCHUSTER,
CARL K. BENNETT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."