

R. B. DISBROW.  
COMBINED FAUCET AND STRAINER.  
APPLICATION FILED AUG. 20, 1908.

945,763.

Patented Jan. 11, 1910.

Fig. 1

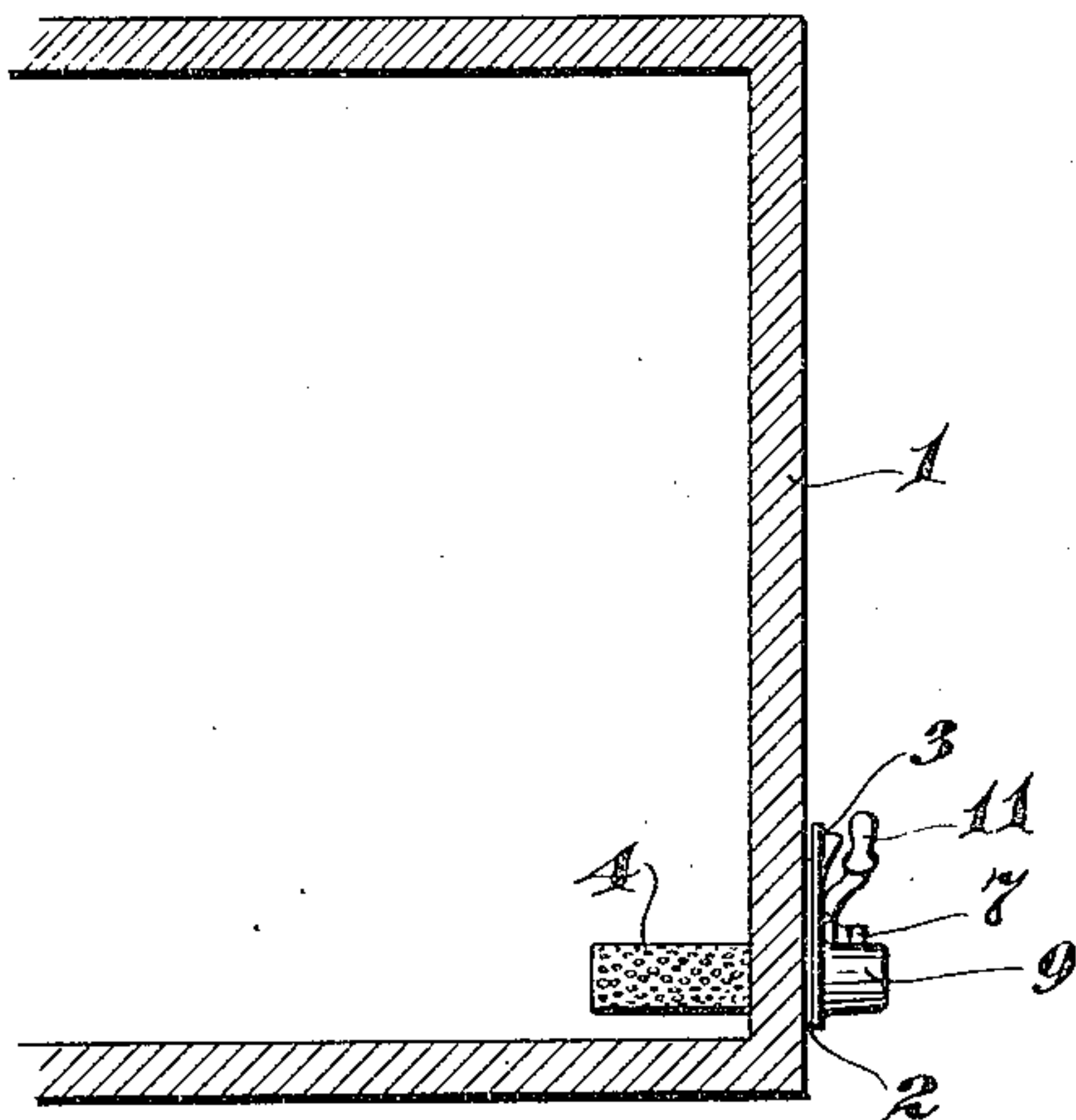


Fig. 3

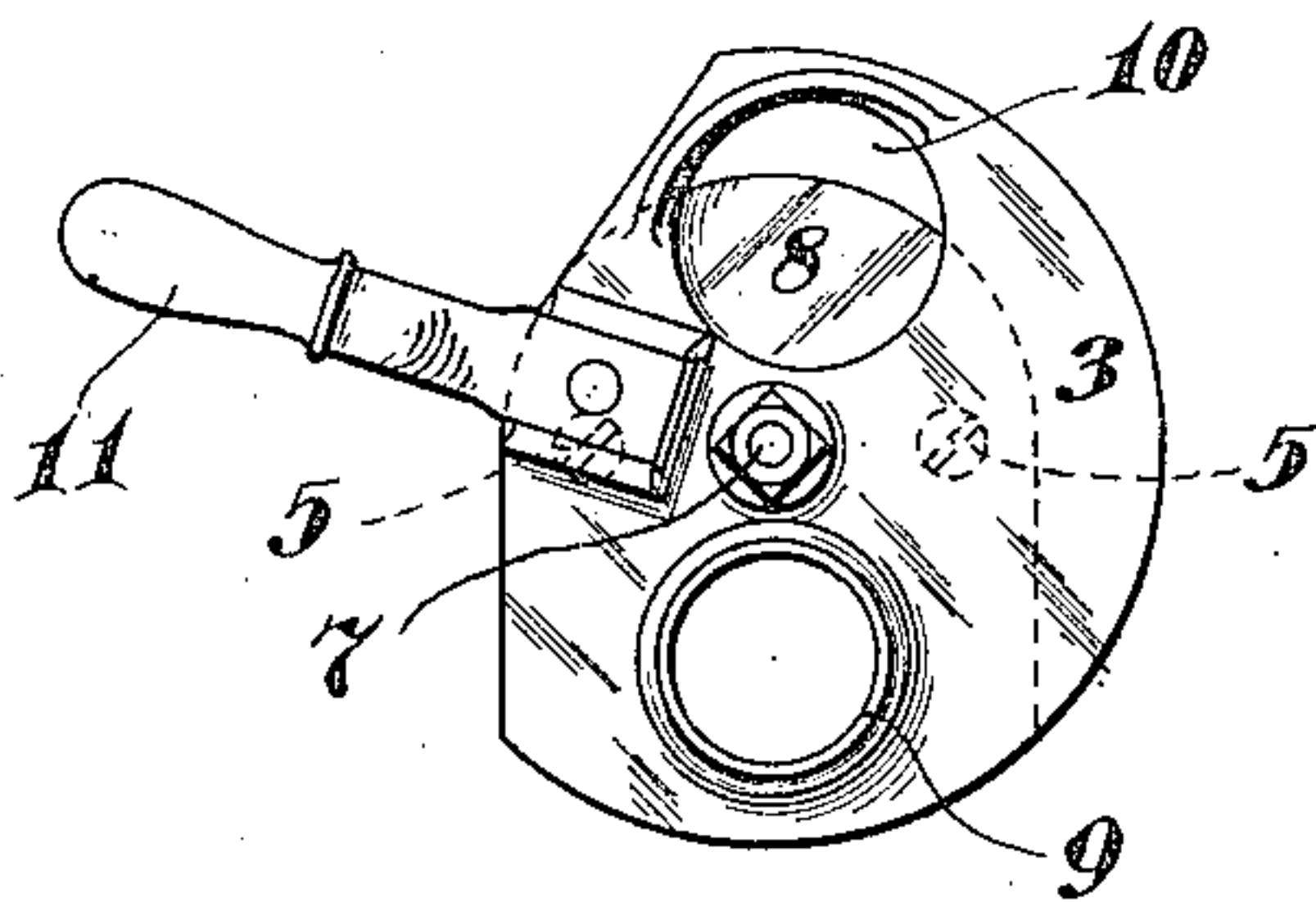


Fig. 4

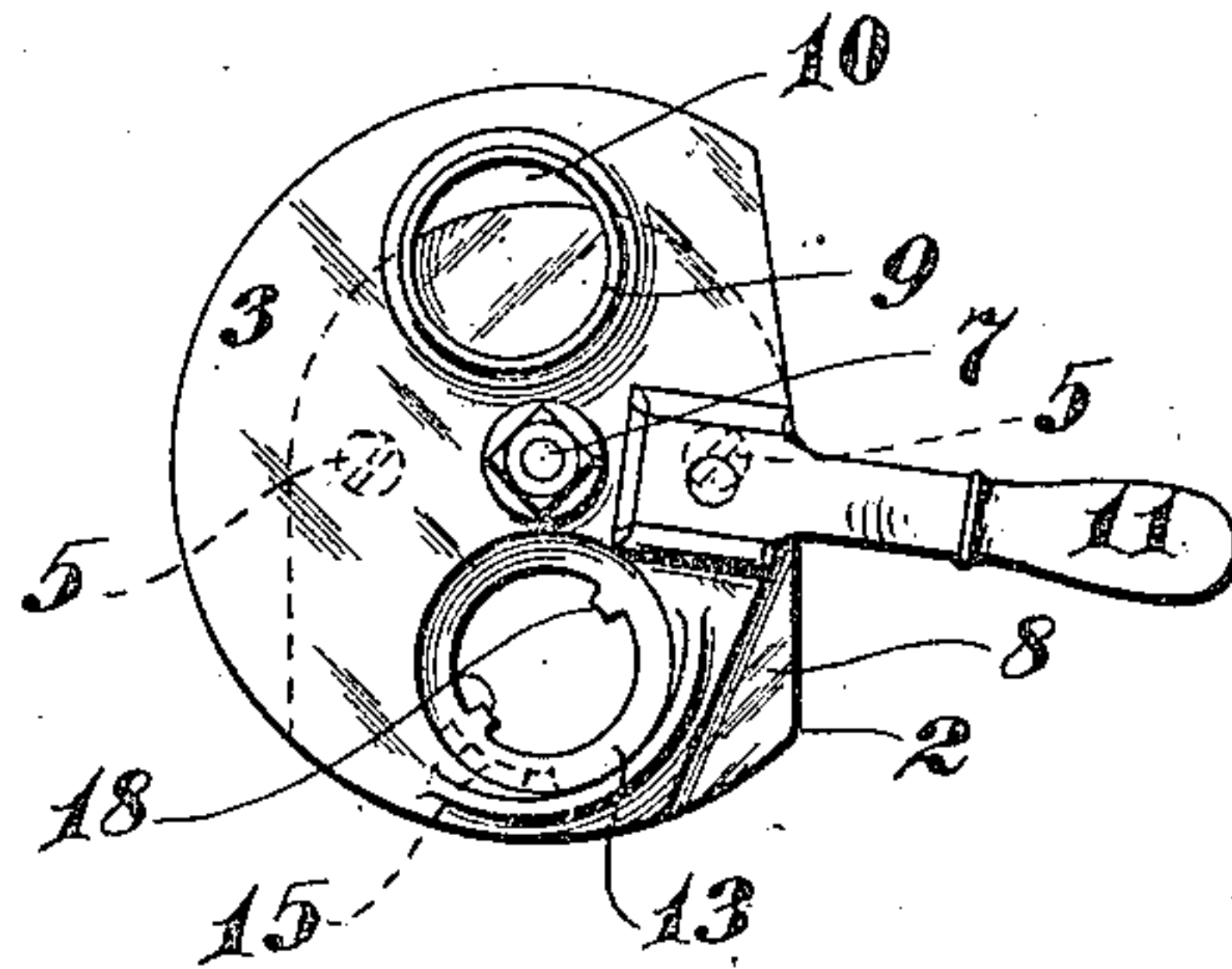


Fig. 2

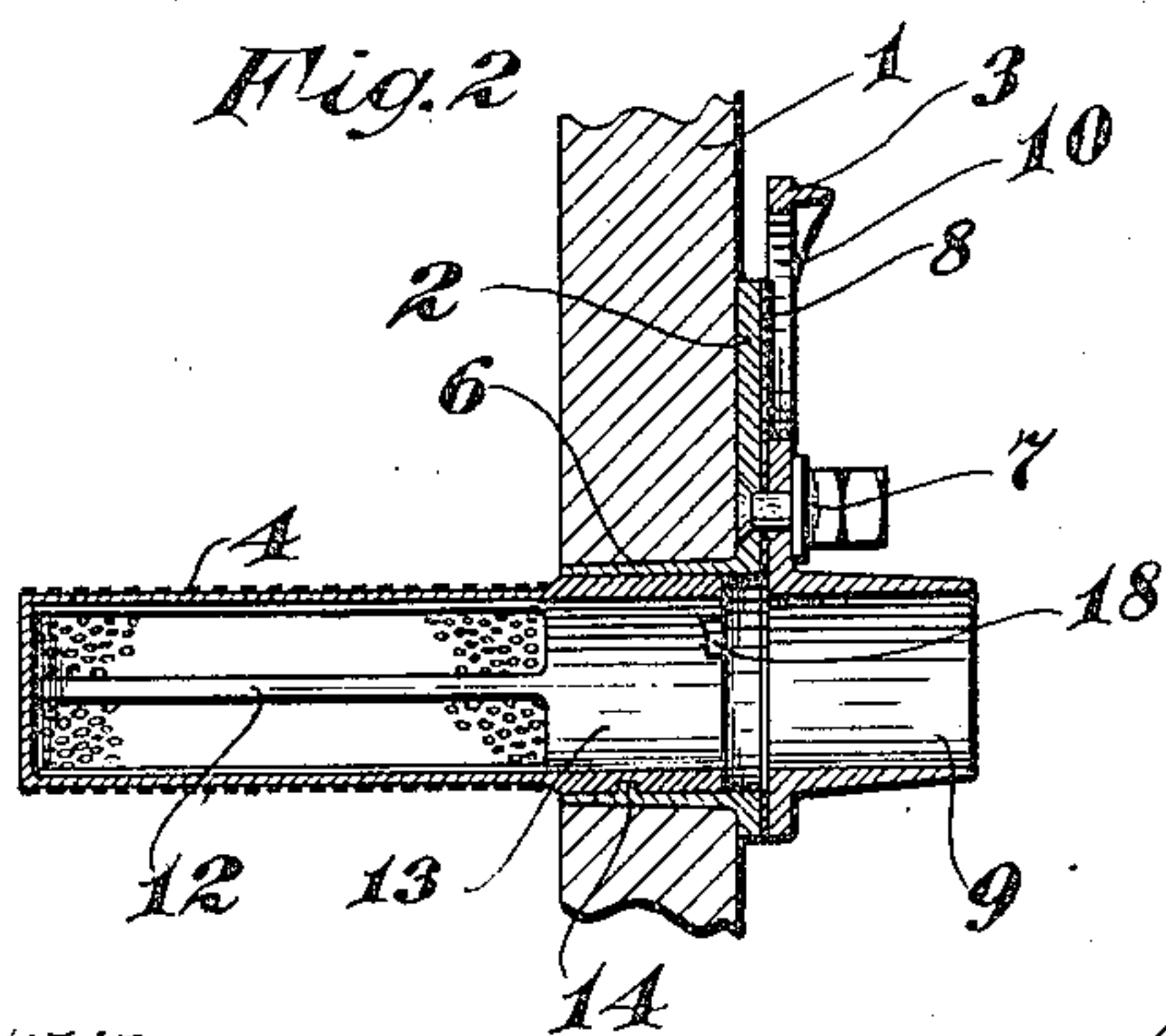


Fig. 5

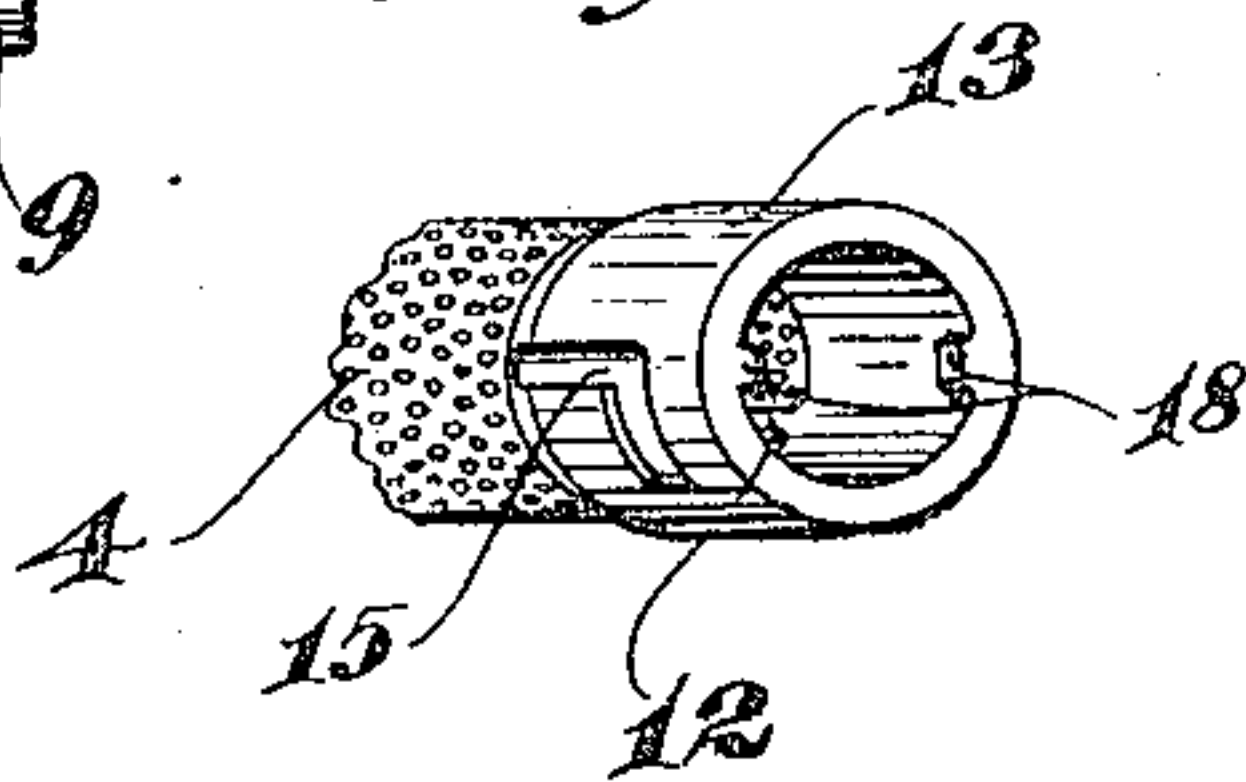


Fig. 6

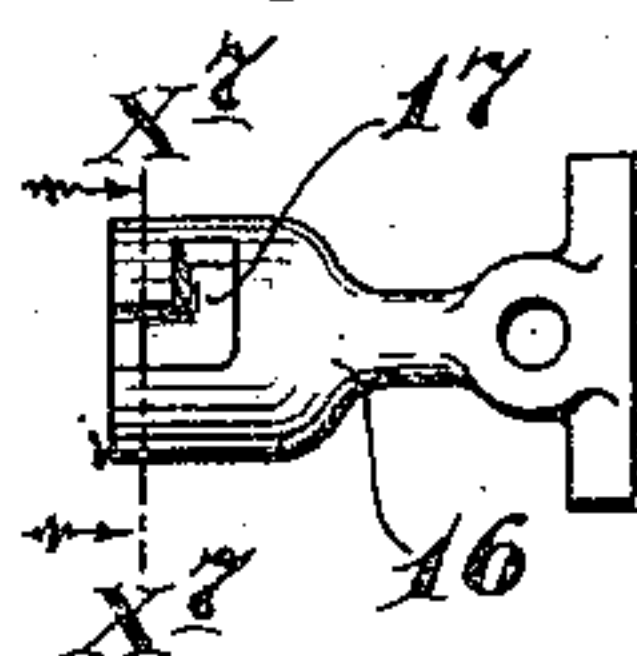
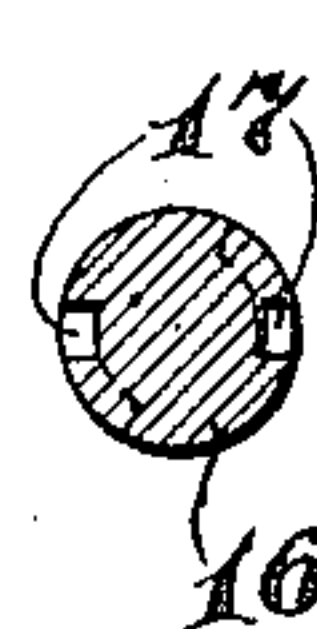


Fig. 7



Witnesses:

L. L. Simpson

W. H. Souba

Inventor:  
Reuben B. Disbrow  
By his Attorneys:

Williamson M. M. M.



# UNITED STATES PATENT OFFICE.

REUBEN B. DISBROW, OF OWATONNA, MINNESOTA.

COMBINED FAUCET AND STRAINER.

945,763.

Specification of Letters Patent. Patented Jan. 11, 1910.

Application filed August 20, 1908. Serial No. 449,430.

*To all whom it may concern:*

Be it known that I, REUBEN B. DISBROW, a citizen of the United States, residing at Owatonna, in the county of Steele and State of Minnesota, have invented certain new and useful Improvements in Combined Faucets and Strainers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide an improved combination faucet and strainer especially adapted for use in connection with combined churns and butterworkers, but adapted, nevertheless, for a more general use; and to the above ends, the invention consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

In the accompanying drawings, the invention is illustrated as applied to the drum of a combined churn and butterworker, but it will, of course, be understood that the same may be applied to various other devices such, for instance, as vats, coffee tanks, and similar receptacles.

In the drawings, like characters indicate like parts throughout the several views.

Referring to the drawings; Figure 1 is a vertical section showing a portion of the drum of a combined churn and butterworker and illustrating my improved combined faucet and strainer applied thereto. Fig. 2 is an enlarged vertical section, taken through the combined faucet and strainer and through a portion of the drum head to which it is applied. Figs. 3 and 4 are views in front elevation, showing the combined faucet and strainer removed from the drum, and illustrating different positions thereof. Fig. 5 is a perspective view of the strainer, some parts thereof being broken away. Fig. 6 is a view in elevation, showing a key for applying and removing the strainer; and Fig. 7 is a section, taken on the line  $x-x'$  of Fig. 6.

The drum of the combined churn and butterworker is indicated by the numeral 1. The improved combination faucet and strainer is shown as applied to the head of this drum as close as practicable to the shell of the drum, and it comprises as its principal parts a fixed plate 2, a pivoted plate 3 and a strainer 4. The fixed plate 2 is rigidly secured, preferably by screws 5, indicated by

dotted lines in Figs. 3 and 4, and is provided with a sleeve-like hub 6 that is passed inward through and seated in the head of the drum. The plate 3 is pivotally connected to the plate 2 preferably, as shown, by means of a nutted bolt 7; and to form a liquid tight joint between the said two plates, the said fixed plate 2 is provided, on its outer face, with a thin facing of sheet lead indicated by the numeral 8. The hub 6 of the fixed plate 2 is located eccentric to the nutted bolt 7; and, at diametrically opposite points, the pivoted or rotary plate 3 is provided with a discharge nozzle 9 and a large perforation 10 which, in turn, are adapted to be brought into registration with the hub 6 by a rotary movement of the said plate 3. The said plate 3 is provided with a handle or operating lever 11, by means of which it may be oscillated or rotated. When the plate 3 is set in an intermediate position, both the nozzle 9 and perforation 10 will be out of registration with the hub 6, and the latter will be tightly closed by the unbroken body portion of the said plate 3.

The strainer 4 may be made of any suitable material, but is preferably made in the form of a perforated thin metal cylinder which should be galvanized to prevent corrosion. This perforated cylinder is telescoped loosely onto a skeleton tubular frame 12 having a solid or imperforate inner end or head, and is provided at its outer end with a sleeve portion 13 that quite closely fits the hub 6 of the fixed plate 2.

To lock the strainer to the hub 6 in an operative position, as shown in Figs. 1 and 2, a bayonet joint connection consisting of an internal lug 14 of the hub 6 and an angular or L-shaped groove 15 on the sleeve portion 13 is provided.

When the strainer is applied, as best shown in Fig. 2, and the pivoted plate 3 is moved so that its discharge nozzle 9 registers with the hub 6, buttermilk may be withdrawn from the churn drum, and no butter will be permitted to escape therewith, the latter being, of course, held back by the strainer. After the buttermilk has been drawn off, more or less water is usually thrown into the drum for use when the butter is salted and worked, and it is then desirable that the strainer be removed, because in the first place, there is no need of the strainer, and furthermore, the brine has a very strong tendency to corrode the strainer even when the



the strainer is galvanized. To accomplish this, the pivoted plate 3 is moved into position to cause its large perforation 10 to register with the hub 6, and this being done, the strainer 5 may be removed through the said perforation. The strainer should, of course, be removed from the drum during the salting and working process.

To facilitate the application and removal 10 of the strainer, a key or hand-piece 16 is provided. This key has a transverse handle and a hub portion, which latter is provided, as shown, with diametrically opposite angular or L-shaped grooves 17 that are adapted to 15 engage internal lugs 18 of the sleeve 13. These grooves 17 and lugs 18 constitute bayonet joint connections between the key and the sleeve of the strainer. When this strainer is to be removed by means of this key, the key 20 is inserted into the strainer sleeve 13, and by combined endwise and rotary movement, its angular grooves 17 are engaged with the lugs 18. Then, by further rotation of the key, the strainer is rotated in a direction to bring the 25 longitudinal portions of the angular groove 15 into registration with the cooperating lugs 14, and then the said strainer is pulled axially outward through the hub 6 and aligned perforation 10. The strainer may be 30 applied in working position by substantially a reverse operation. When the strainer is removed, the passage through the hub 6 may, as is evident, at will, be closed by the plate 3; or opened by registration therewith 35 of the nozzle 9.

The device above described is of simple construction and of small cost, and, in actual practice, its efficiency has been demonstrated.

What I claim is:—

40 1. In a combined faucet and strainer, the combination with a non-rotary inner plate having a discharge passage, of an outer plate pivotally connected to said inner plate at a

point eccentric to the said discharge passage thereof and having a body portion adapted 45 to close the said discharge passage, in one position, and cut away so as to open said discharge passage when moved into another position, and a strainer detachably seated in the said discharge passage of said inner 50 plate and arranged to be removed, by outward movement therethrough while said pivot plate is attached to said inner plate, substantially as described.

2. In a combined faucet and strainer, the 55 combination with an inner plate having a sleeve-like hub affording a discharge passage, of an outer plate pivotally connected to said inner plate at a point eccentric to its hub, and having a body portion adapted to 60 close said passage in one position and cut away so as to open said passage when moved in another position, and a strainer detachably seated in said hub and arranged to be removed by outward movement through said 65 hub, while said pivoted plate is attached to said inner plate, substantially as described.

3. In a combined faucet and strainer, the combination with an inner plate having a sleeve-like hub, of an outer plate pivotally 70 connected to said inner plate and movable to open and close the passage in said sleeve, and a strainer detachably held in said sleeve by an interlocking joint connecting therewith, the said strainer having a body portion 75 formed internally with a lock groove adapted to be engaged by a key, whereby said strainer may be removed from working position by means of such key, substantially as described. 80

In testimony whereof I affix my signature in presence of two witnesses.

REUBEN B. DISBROW.

Witnesses:

FRANK A. DUNHAM,  
L. A. DISBROW.