

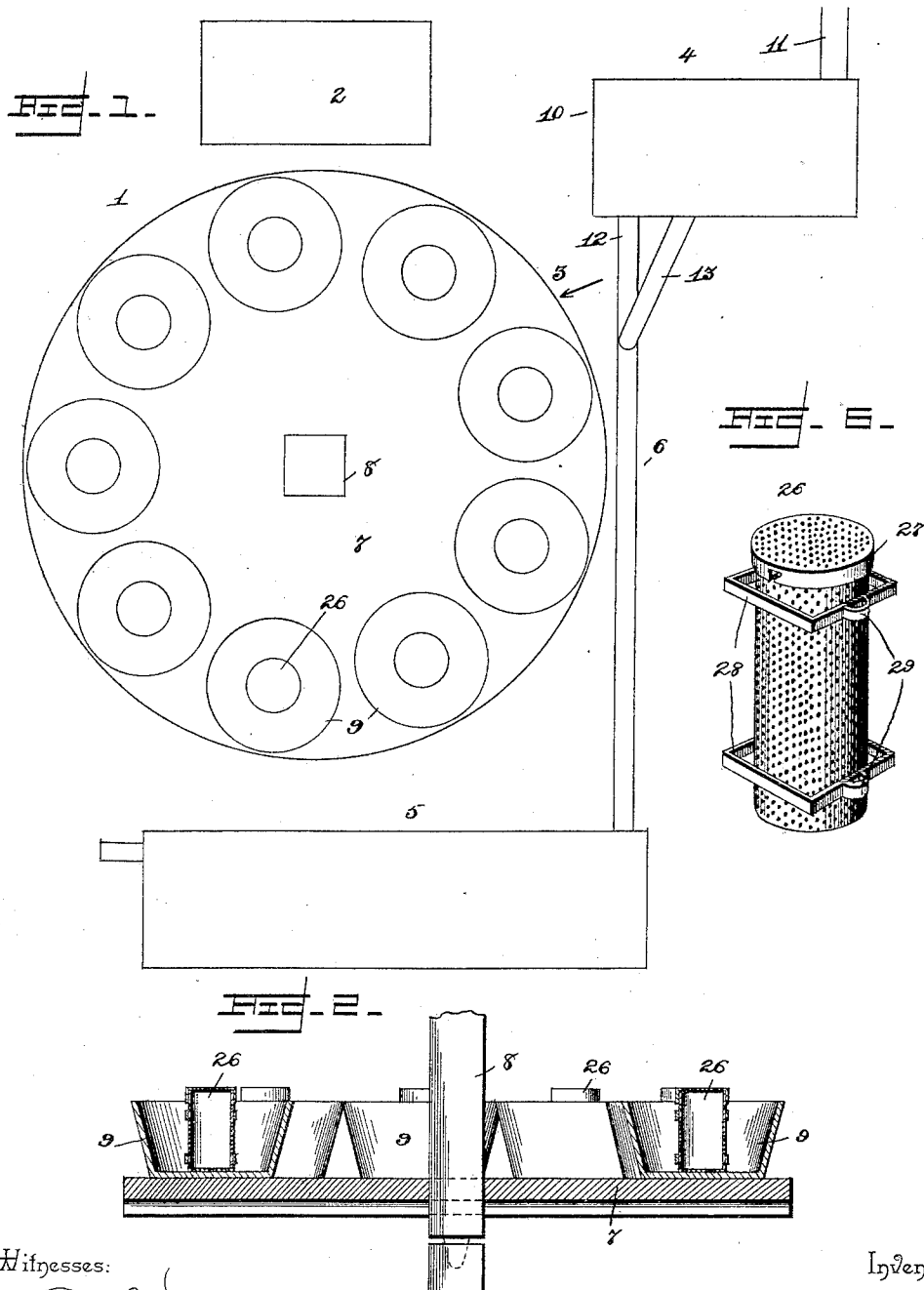
(No Model.)

3 Sheets—Sheet 1.

W. N. MACQUEEN.
OYSTER WASHING MACHINE.

No. 477,134.

Patented June 14, 1892.



Witnesses:

E. S. Duwall
H. S. Duwall

By his Attorneys,

Inventor

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Cash & Co.

No Model.)

3 Sheets—Sheet 2.

W. N. MACQUEEN.
OYSTER WASHING MACHINE.

No. 477,134.

Patented June 14, 1892.

FIG - 3 -

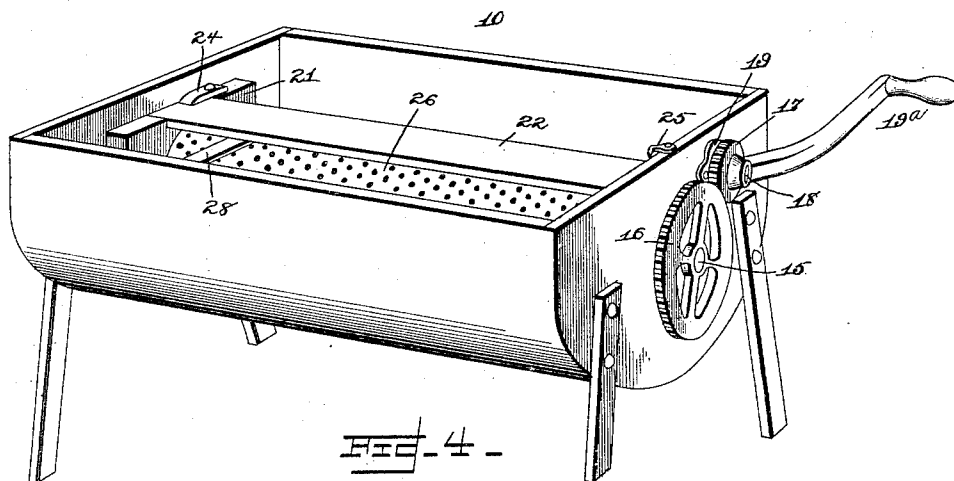


FIG - 4 -

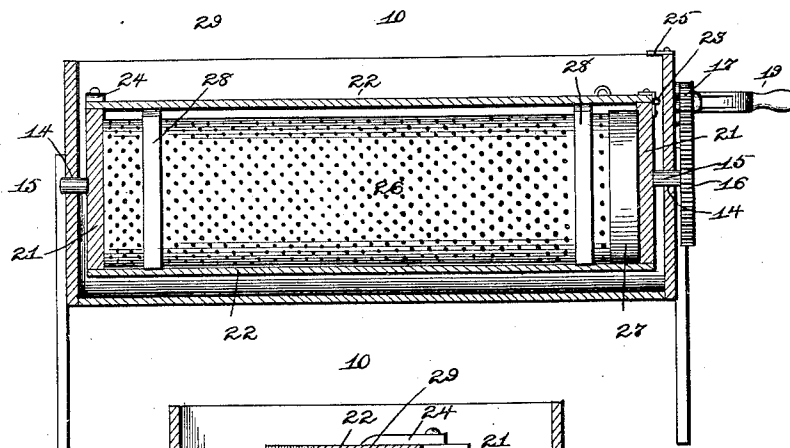
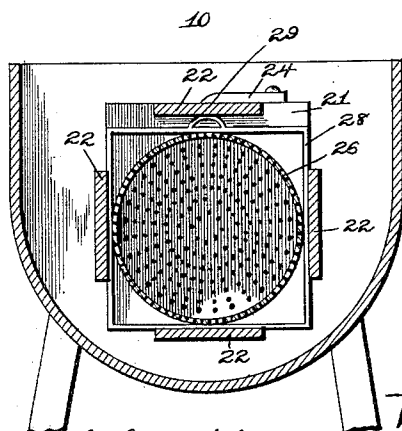


FIG - 5 -



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(No Model.)

3 Sheets—Sheet 3.

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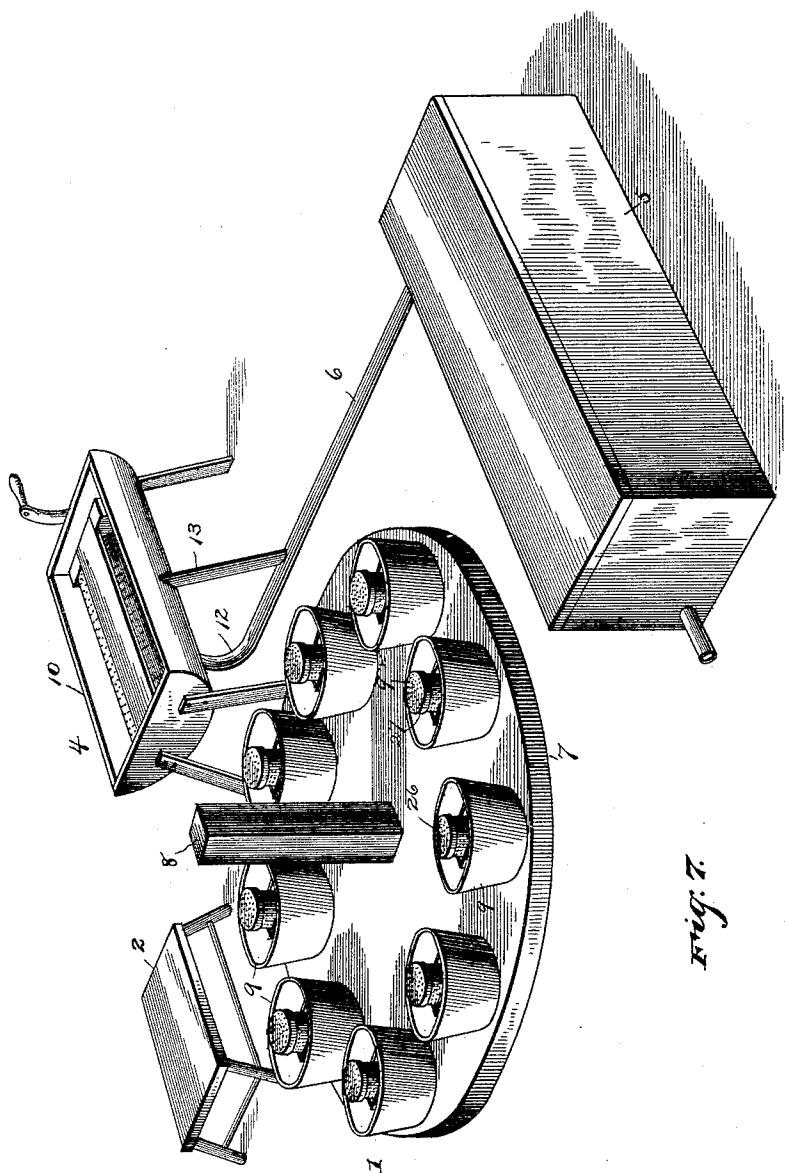


Fig. 7.

Witnesses

B. B. O'Connell
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Inventor

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UNITED STATES PATENT OFFICE.

WILLIAM N. MACQUEEN, OF BALTIMORE, MARYLAND.

OYSTER-WASHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 477,134, dated June 14, 1892.

Application filed November 17, 1891. Serial No. 412,188. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. MACQUEEN, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented a new and useful Oyster-Washing Machine, of which the following is a specification.

This invention relates to an apparatus for washing oysters previous to the process of canning the same, and the objects in view are to provide an apparatus of cheap and simple construction adapted to uniformly and expeditiously cleanse the shucked oysters and give the same a final rinsing, whereby they are prepared for the process of canning.

A further object of the invention is to provide for a reuse of the water employed in cleansing the oysters, whereby the same is not wasted, and a saving amounting to considerable in localities where there is a scarcity of water is effected.

With the above objects in view the invention consists in certain features of construction and arrangement of parts hereinafter specified and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a diagrammatic view of the entire apparatus. Fig. 2 is a transverse section in detail of the tub-carrying turn-table. Fig. 3 is a perspective view of the rinsing-machine. Fig. 4 is a longitudinal section thereof. Fig. 5 is a transverse section. Fig. 6 is a detail in perspective of the oyster-cylinder. Fig. 7 is a perspective view of the apparatus.

Like numerals of reference indicate like parts in all the figures of the drawings.

Referring to Fig. 1, 1 designates the tub-carrying turn-table upon which the oysters receive their preliminary washing.

2 designates the platform occupied by the attendant who places the oysters upon the turn-table.

3 designates the point at which the oysters are removed from the turn-table, and 4 designates the final washing or rinsing machine, to which the oysters are conveyed and subjected subsequent to their removal from the turn-table.

5 designates a cooling-tub, and 6 a pipe leading from the rinsing-machine to said tub, for a purpose hereinafter made apparent.

The turn-table consists of a circular table or wheel 7, which is supported upon a vertical shaft 8, stepped in suitable bearings, and in this instance revolved by hand, together with the table, though other means may be employed for this purpose. At intervals there is mounted upon the table ordinary tubs 9, which are partially filled with water.

10 designates the semicircular tub of the rinsing-machine, and to the same leads a water-supply pipe 11. A drain-pipe 12 and an overflow-pipe 13 lead, respectively, from the bottom and near the top of the rinsing-tub 10, communicate outside the tub, and merge into a supply-pipe 6, leading to the cooling-tank 5. The pipe 6 is only employed in sections of the country where water is scarce, and when employed serves to reuse the same by conducting it to the tank 5, in which in the ordinary process of canning the cans are set for the purpose of suddenly chilling their contents and arresting the operation of cooking. The opposite ends or heads of the rinsing-tub 10 are provided with a pair of longitudinally-opposite bearings 14, and the same receive the axial trunnions 15, formed upon the opposite end walls of an internal revoluble frame. One of the trunnions extends through the head of the tub and carries a large gear 16, which is engaged and adapted to be rapidly rotated through the medium of a small gear 17, mounted upon a stub-shaft 18, journaled in a bracket 19, secured to the tub, said shaft being rotated through the medium of an ordinary crank 19^a. The internal revoluble frame in this instance consists of a pair of opposite rectangular heads 21, which are connected at their four sides by a longitudinal strip 22, so that the frame is open. One of the strips 22 is hinged, as at 23, to the edge of the end wall of the frame, and may be locked at its opposite end when the strip is lowered by means of a turn-button 24, swiveled upon the adjacent end wall. The strip may also be maintained in an elevated position by means of a swiveled hook 25, mounted upon the end wall of the rinsing-tub, and when so maintained locks the internal frame against rotation.

26 designates the oyster receptacle or cylinder, and the same has a cover 27 removably

mounted upon one end, which, like the side wall and bottom of said cylinder, are closely perforated, as shown. Upon the opposite ends of the cylinder a pair of rectangular metal frames 28 are secured, the same being of such dimensions as will adapt them to fit within the rectangular revoluble internal frame of the rinsing-machine. Each of the frames is also provided with a pair of finger-receiving loops 29, in which the fingers of the operator may be engaged when in the act of placing a cylinder within or withdrawing it from the internal frame.

In operation, the oysters as they are delivered by the shuckers to the attendant at Fig. 2 are emptied by the attendant into the cylinders that are in tubs on turn-table, which tubs are partly filled with water. When the first cylinder has sufficient oysters in it, the attendant turns the table so as to bring another cylinder in position to be filled, and so on in rotation. When the first cylinder filled reaches the point 3, or wherever it is to be removed from the tub by the second attendant, he twists it around several times in the tub, so as to wash out the rough sand, &c., then removes it, (places an empty one in its place,) puts the cover on it, and puts it in the rinsing or washing machine, and by a few rapid turns of the machine the oysters are thoroughly washed and freed from all impurities, that the holes in cylinder will allow to pass through. Fresh water is kept flowing into the machine all the time it is in use. In inserting and removing the cylinders the internal frames are held stationary by the means heretofore described. When the cylinders are removed from the rinsing-machine, the oysters are emptied onto the sorting-table, where they are sorted, and all shells, &c., that were too large to pass through the holes in cylinders are removed. The packing then proceeds in the usual way. Before removing the filled cylinders from tubs on turn-table the operator twists them around several times, which partly washes the oysters. The water from said tubs is allowed to go to waste, and pure fresh water is constantly flowing into the rinsing-machine, and the water from said machine first passes into a settling-tub and from that to the cooling-tub, so that when it reaches the cooling-tub it is in as good condition for the purpose required as if it had never been used.

In various localities of the country water is a scarcity and requires constant attempts at saving in order to meet the demand. For this reason alone, therefore, I prefer in some instances to provide the pipe 6, heretofore mentioned, which conducts the running water after it has passed through the rinsing-machine, and serves its useful purpose in that respect, to the tank 5, where it serves to cool and check the process of cooking going on within the cans.

From the foregoing description, in connec-

tion with the accompanying drawings, it will be seen that I have provided an apparatus of great simplicity and easily operated, and adapted to facilitate this first or primary step in the process of packing—namely, a thorough washing of the bivalves.

Numerous changes in regard to the details of my invention will readily suggest themselves, and I do not limit my invention to the details herein shown, but hold that I may make such changes as experience may suggest and as are comprehended in the term "mechanical skill."

Having described my invention, what I claim is—

1. In an apparatus of the class described, a revoluble turn-table having a series of water-receiving tubs mounted at intervals thereon and removable perforated cylinders mounted in the tubs, substantially as specified.

2. In an apparatus of the class described, the combination, with a rotatable turn-table, a series of water-receptacles thereon, of a tub having bearings, a series of perforated oyster-receiving cylinders mounted in the receptacles and removable therefrom, and means for removably and rotatably supporting them in the tub, substantially as specified.

3. In an apparatus of the class described, the combination, with the rotatable turn-table, the series of receptacles arranged at intervals thereon, and the series of perforated cylinders removably mounted in the receptacles, of the tub, means for supporting a cylinder removably and rotatably in the tub, and the cooling-tank adjacent to the table and tub, substantially as specified.

4. In an apparatus of the class described, the combination, with the tub having opposite bearings, of the internal frame having trunnions mounted in the bearings and provided with a lid or cover, means for rotating the internal frame, and a perforated oyster-receiving cylinder mounted in the internal frame, substantially as specified.

5. The combination, with the tub, of the internal rotatable frame, a cover for the frame, means for locking the cover in a raised or lowered position, a perforated oyster-receiving cylinder, and opposite rectangular bands fitting in the internal frame and secured over the cylinder near its ends, substantially as specified.

6. In an apparatus of the class described, the combination, with the tub having bearings, the internal frame comprising the opposite rectangular ends and longitudinal connecting-strips, one of which is hinged to one of the ends, a button located on the opposite end for locking the strip in a closed position, and a hook on the tub for locking the strip in a raised position, and the perforated cylinder having the rectangular straps and finger-loops adapted to fit within the frame, substantially as specified.

7. In an apparatus of the class described,
the combination, with the tub for receiving
the rinsing-cylinder and the cooling-tank, of
an inlet supply-pipe for the tub and an out-
5 let-pipe for the latter, said outlet-pipe lead-
ing to the cooling - tank, substantially as
specified.

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

WILLIAM N. MACQUEEN.

Witnesses:

E. C. DUNCAN,

JAMES M. CONGLETON.