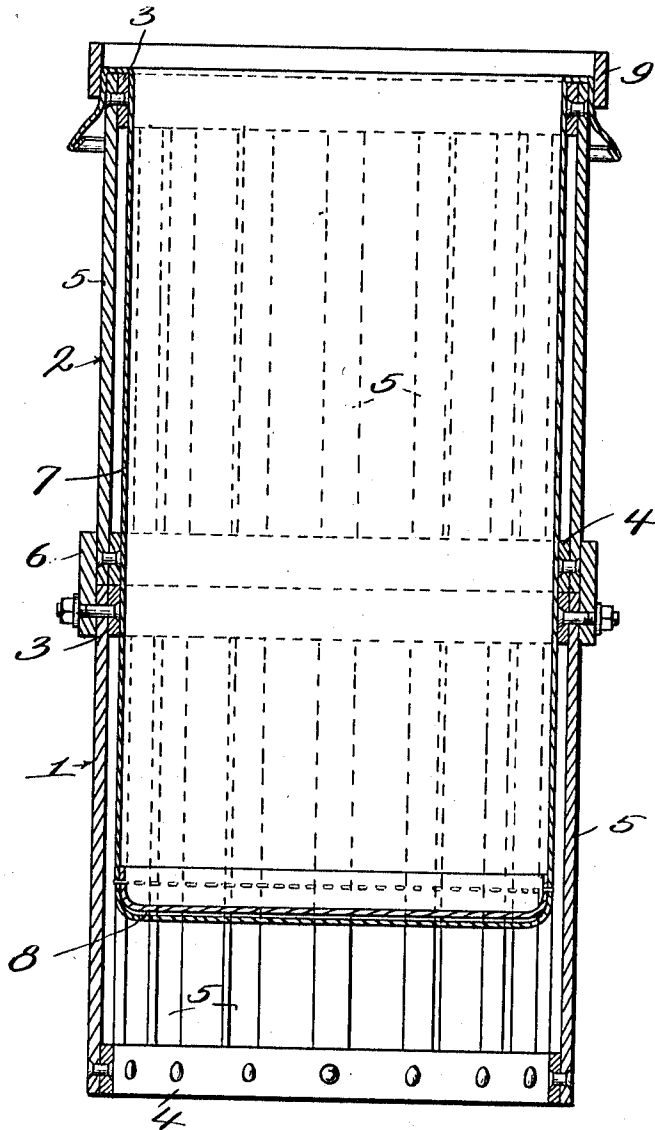


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 FILTER FOR SACCHARINE JUICES.
 APPLICATION FILED MAY 27, 1912.

1,035,680.

Patented Aug. 13, 1912.



Witnesses:
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UNITED STATES PATENT OFFICE.

GEORGE BOESEL, OF NEW ORLEANS, LOUISIANA.

FILTER FOR SACCHARINE JUICES.

1,035,680.

Specification of Letters Patent.

Patented Aug. 13, 1912.

Application filed May 27, 1912. Serial No. 699,900.

To all whom it may concern:

Be it known that I, GEORGE BOESEL, citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Filters for Saccharine Juices, of which the following is a specification.

This invention relates to improvements in filters, and proposes a filter which is especially applicable for cleaning and straining heavy saccharine juices, and which includes a foraminous bag as the filtering medium.

The object of the invention is to facilitate the dissociation of the bag aforesaid from the filter frame, especially when the removal of said bag by a manual lifting operation is impractical or difficult.

An embodiment of the invention is illustrated in the accompanying drawings, wherein: the figure is a central vertical sectional view.

The improved filter comprehends a pair of superposed frames generally similar in construction, the lower frame being shown at 1, and the upper frame at 2. Each of the frames is conveniently and preferably made up of a pair of hoops 3 and 4, arranged respectively in upper and lower relation, and vertical bars or staves 5 arranged at suitable intervals from one another and connecting the hoops, the bars or staves 5 being suitably secured to the outer circumferential faces of the hoops.

The frames 1 and 2 are of the same diameter and in the use of the filter, the lower hoop 4 of the frame 2 rests upon the upper hoop 3 of the frame 1, and is positively centered and held against displacement by a flange or ring 6 which is secured to the upper end of the frame 1, preferably to the hoop 3 thereof, and which has a vertical dimension equal to the combined vertical extent of the adjacent hoops 3 and 4 of the frames. The hoop 4 of the upper frame 2 is confined within the flange or ring 6. It will be apparent that said flange or ring not only prevents the upper frame from displacement, but also facilitates the positioning of the upper frame upon the lower frame.

The filtering medium consists of a bag 7 which has a diameter corresponding to the inside diameter of the frames 1 and 2, and which preferably has a double filtering

bottom 8. The bag 7 may be made of any suitable textile or material. The upper end of the bag 7 is folded over the hoop 3 of the frame 2, and is suitably secured, preferably by a clamping ring 9, the diameter of which is so selected that when said ring is arranged in concentric surrounding relation to the hoop 3 of the frame 2, it will securely clamp the overturned marginal portion of the bag 7 against the bars or staves 5 of the upper frame.

The saccharine juices are very heavy, and in filtering these juices with bag filters, it is frequently the case that it is almost impossible to remove the bag from the filter body or frame. The construction herein described greatly facilitates the separation of the bag from the filter body or frame. After the filtering operation has been completed, the clamping ring 9 is removed, to enable the top of the bag to be turned back into alinement with the body of the bag. If it is now impractical or difficult to lift the bag with the heavy saccharine juices from the filter frame, the bag is allowed to drop through the lower frame and the frames are then lifted away from the bag, the upper frame being first lifted from the lower frame and the latter being then lifted from its support.

It is apparent that by using two frames related to one another in the manner described, the operation of separating the filter body from the bag is greatly facilitated. It will be noted that the frames are relatively light and strong in construction, and each individual frame may be very conveniently handled.

Having fully described my invention, I claim:

1. In a filter for saccharine juices, a pair of open ended frames, one of which is adapted to be seated upon the other for removal therefrom, a filtering bag suspended within the frames, and means for detachably securing the upper portion of the filtering bag at the upper end of the upper frame.

2. In a filter for saccharine juices, a pair of open ended upper and lower cylindrical frames, each comprising upper and lower hoops and bars connecting the hoops, the lower hoop of the upper frame resting upon the upper hoop of the lower frame and the latter having a retaining flange to surround the lower portion of the upper frame, a filtering bag suspended within the

frames, and a removably fitted ring for clamping the overturned upper portion of the bag against the bars at the upper end of the upper frame.

- 5 3. In a filter for saccharine juices, a pair of open ended cylindrical frames having hoops at their adjacent ends, the hoop of the upper frame seating upon the hoop of the lower frame and the latter being provided with an annular retaining flange to
10 surround the lower portion of the upper

frame, a filter bag suspended within the frames, and means for detachably securing the upper portion of the filter bag at the upper end of the upper frame.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEORGE BOESEL.

Witnesses:

CHARLES H. NASH,
ROBERT WATERMAN.

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