

F. BAILEY & F. H. JACKSON.
 APPARATUS FOR STRAINING LIQUIDS.
 APPLICATION FILED OCT. 23, 1909.

996,553.

Patented June 27, 1911.

Fig. 1.

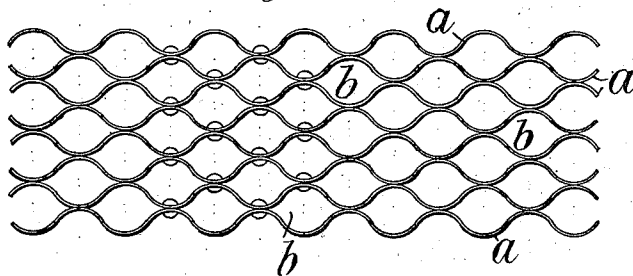


Fig. 2.

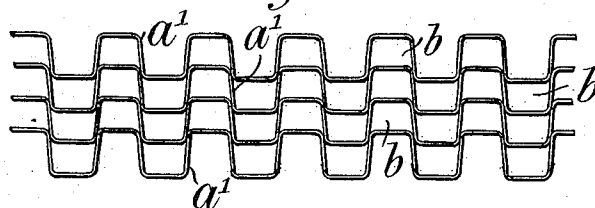


Fig. 3.

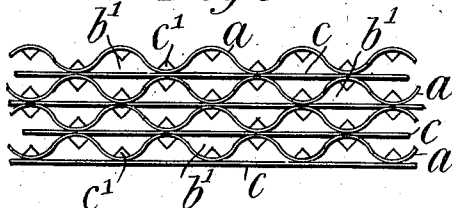


Fig. 5.

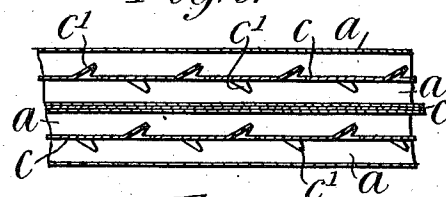


Fig. 4.

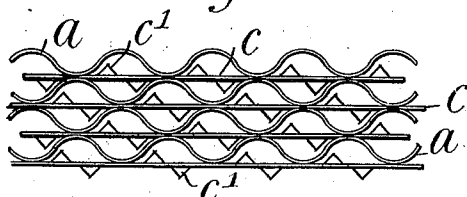
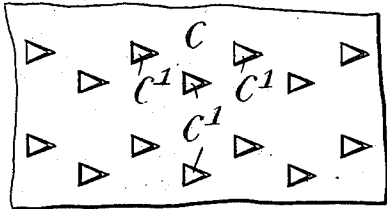


Fig. 6.



Witnesses:

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UNITED STATES PATENT OFFICE.

FRANK BAILEY AND FREDERICK HENRY JACKSON, OF LONDON, ENGLAND.

APPARATUS FOR STRAINING LIQUIDS.

996,553.

Specification of Letters Patent. Patented June 27, 1911.

Application filed October 23, 1909. Serial No. 524,136.

To all whom it may concern:

Be it known that we, FRANK BAILEY and FREDERICK HENRY JACKSON, subjects of the King of Great Britain and Ireland, and residents of 64 Bankside, in the county of London, England, have invented certain new and useful Improvements in Apparatus for Straining Liquids, of which the following is a specification.

This invention relates to apparatus for use in straining water or other liquid containing solid substances, as for example, river water containing weeds, straw and the like; the apparatus being constructed and operated in such a manner that liquid flows through the straining medium in one direction to be strained and in the opposite direction to cleanse the strainer, thereby rendering the apparatus self-cleansing.

In the specification of our United States Patent No. 943,908, dated December 21, 1909, is described a straining apparatus of the self-cleansing type, and our present invention consists in an improved construction of the straining medium or grid.

In the accompanying drawings, Figure 1 is an enlarged fragmentary view of one construction of grid. Fig. 2 is a similar view of another mode of construction. Fig. 3 illustrates a modification of the construction illustrated in Fig. 1. Fig. 4 is a still further modification, while Fig. 5 is a longitudinal section and Fig. 6 a plan of a portion of the intermediate plates shown in Fig. 4.

Referring to Fig. 1, the grid is formed of curved corrugated plates *a* arranged ridge to ridge and placed edgewise to the direction of the stream, so forming channels *b* for the flow of the liquid; the plates being riveted or otherwise fastened together. Fig. 2 shows plates *a'* having rectangular corrugations; the corrugations of each plate coinciding with those of the contiguous plate and riveting being dispensed with.

According to the modified construction illustrated in Fig. 3, a plate *c* is interposed between the curved corrugated plates *a*, so forming a grid having a corrugated plate alternating with a flat plate. With such a construction of grid channels *b'* are formed each having considerably less area than the channels *b*, thus affording a more perfect straining of the liquid. To still further strain the liquid, the plates *a* and *c* may be formed with V-shaped snags *c'*, same being punched out of the plates so as to project from the opposite faces thereof and into the channels *b'*, as shown in Figs. 3 to 6.

What we claim as our invention and desire to secure by Letters Patent is:—

1. In a straining grid wherein, for the purpose of cleansing the straining surface, liquid is caused to flow in the reverse direction, a grid composed of corrugated plates arranged ridge to ridge and placed edgewise to the direction of the stream.

2. In a straining grid wherein, for the purpose of cleansing the straining surface, liquid is caused to flow in the reverse direction, a grid composed of corrugated plates alternating with flat plates; some of the plates being formed with laterally projecting snags.

3. In a straining grid wherein, for the purpose of cleansing the straining surface, liquid is caused to flow in the reverse direction, the improved construction of grid composed of plates some of which are formed with snags which protrude into the passage or passages and present their points to the inflowing liquid, substantially as set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

FRANK BAILEY.

FREDERICK HENRY JACKSON.

Witnesses:

EDWARD HAY,
SIDNEY PAINE.