

No. 688,397.

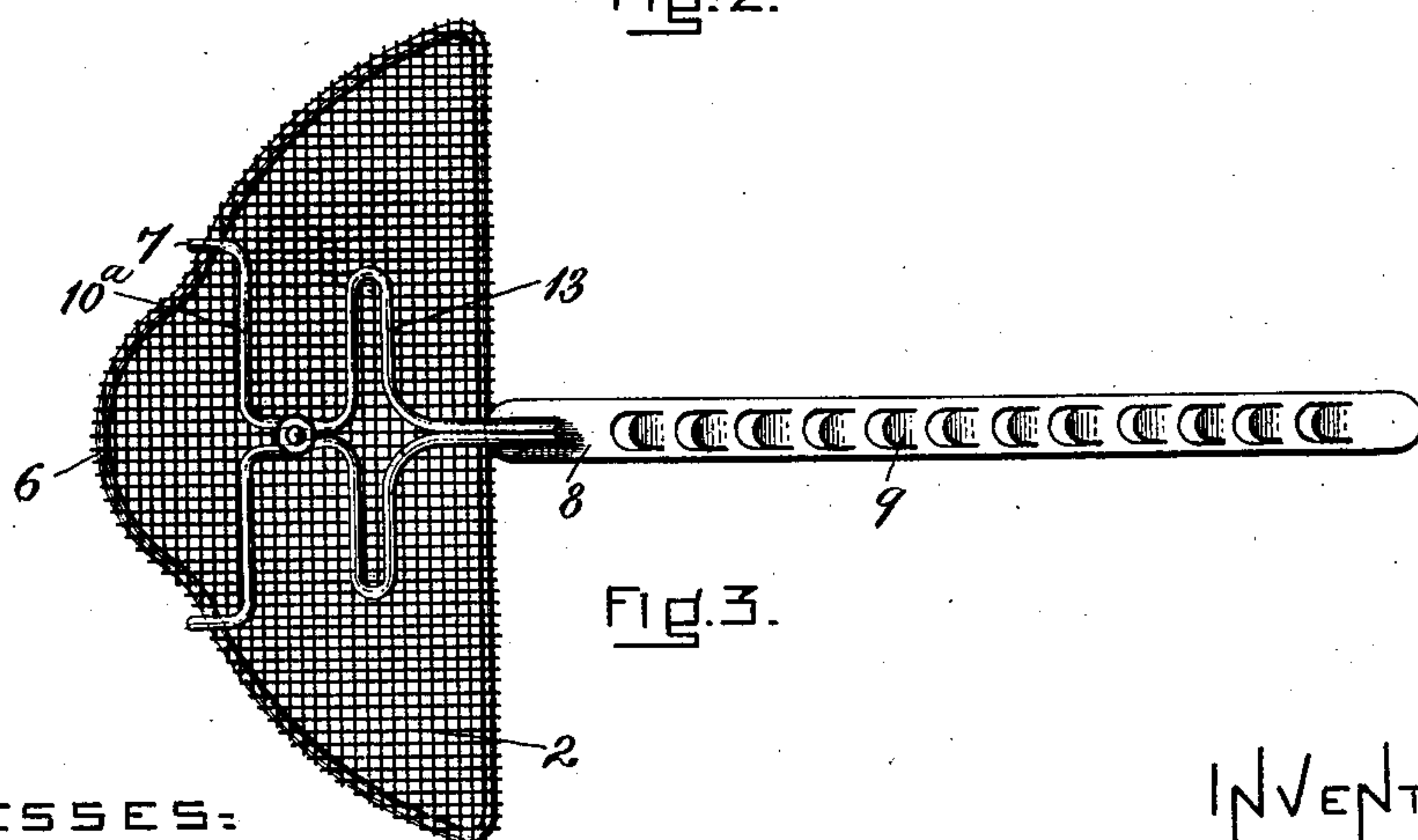
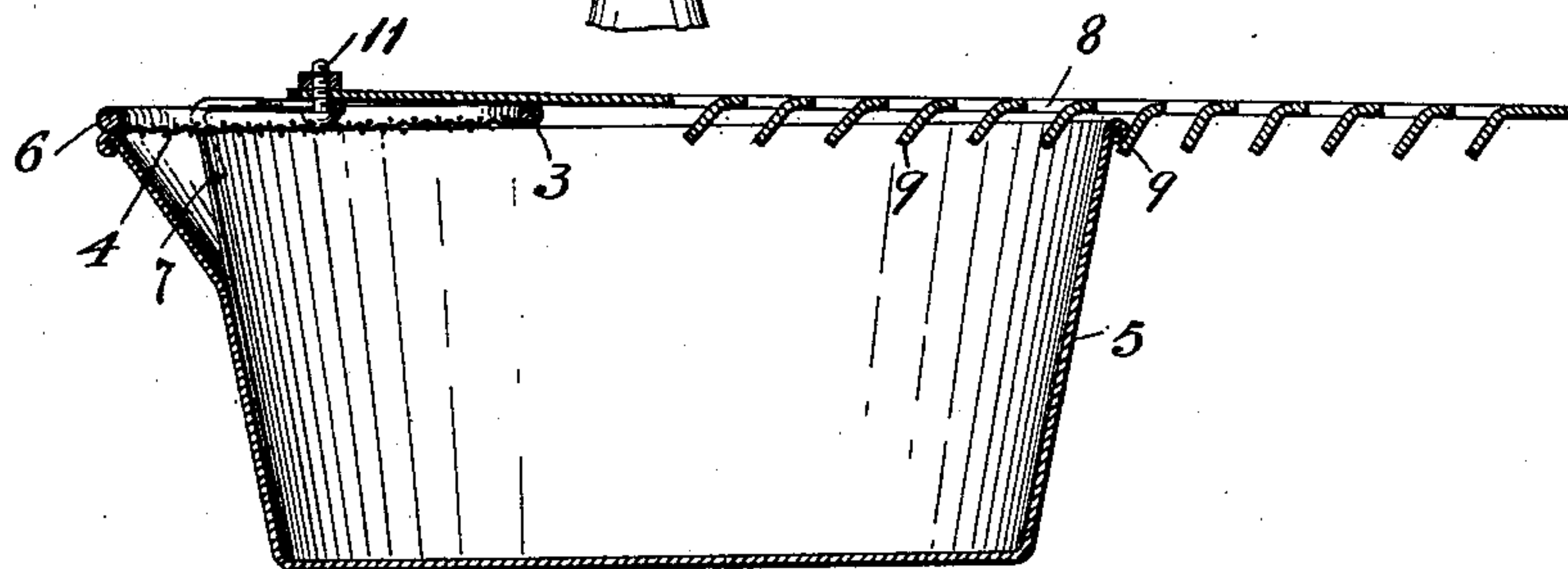
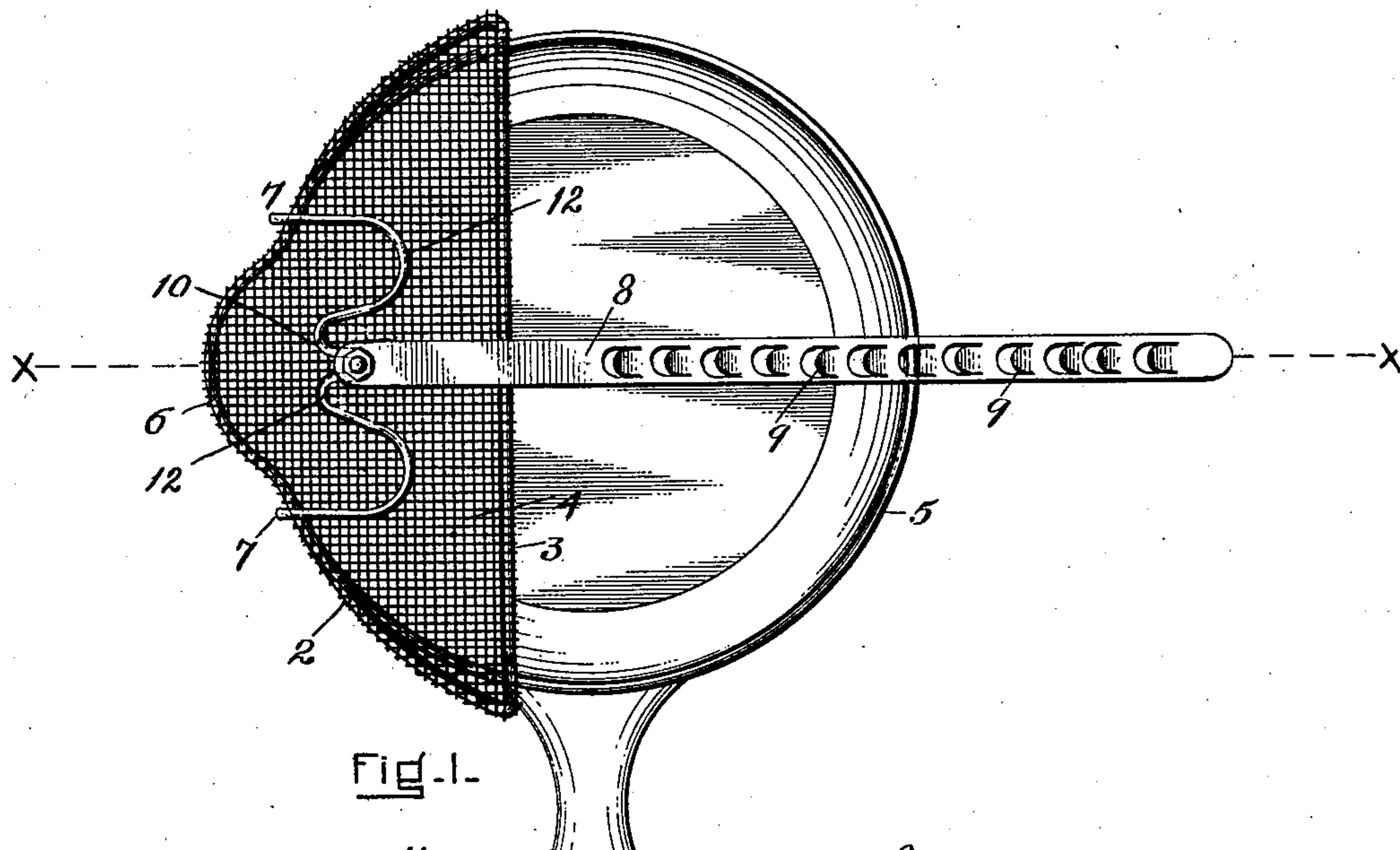
Patented Dec. 10, 1901.

L. H. DES ISLES.
STRAINER.

(Application filed Feb. 18, 1901.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:

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Charles C. Barton Jr.

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Leonard H. Des Isles,
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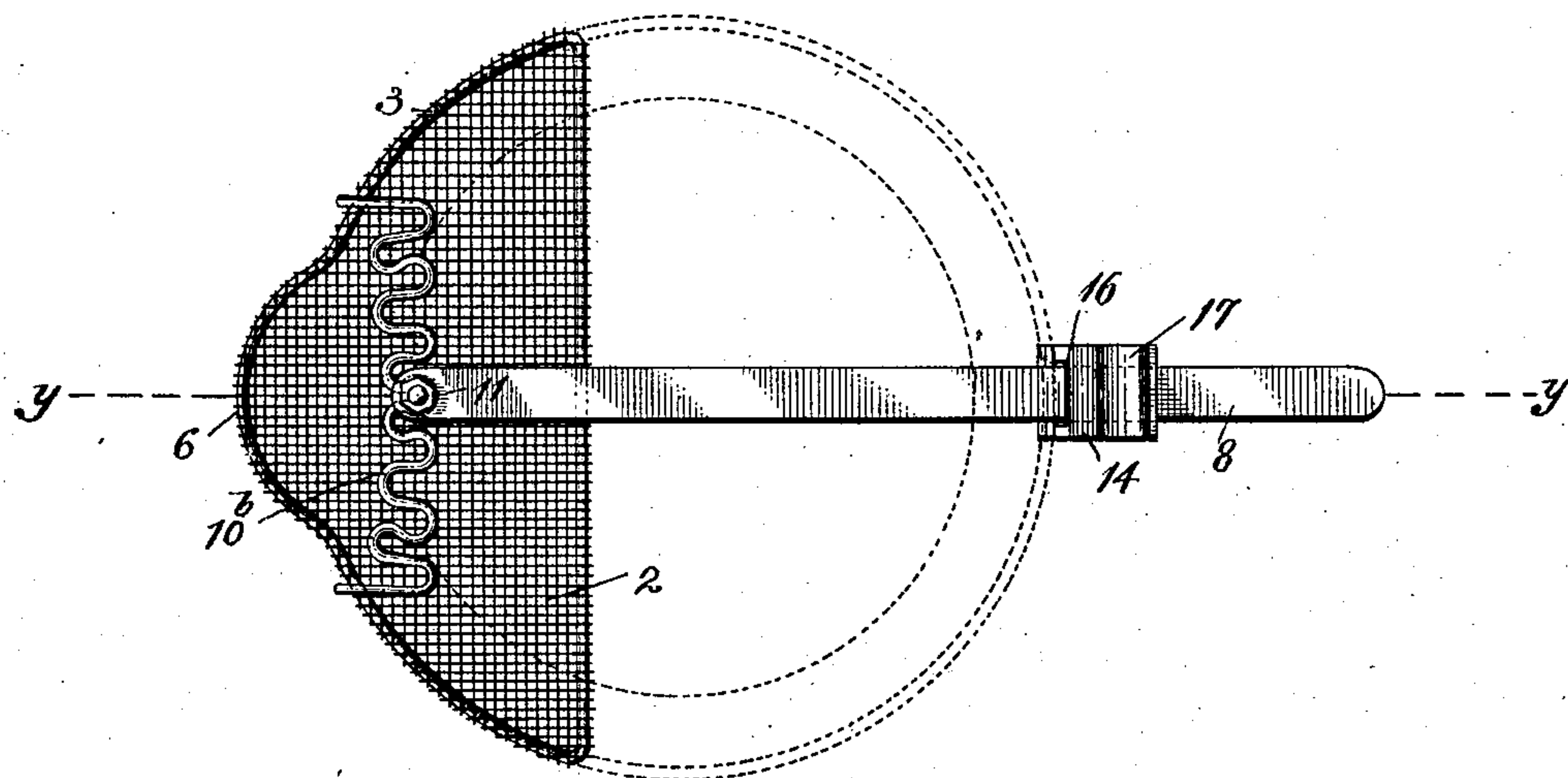


Fig. 4.

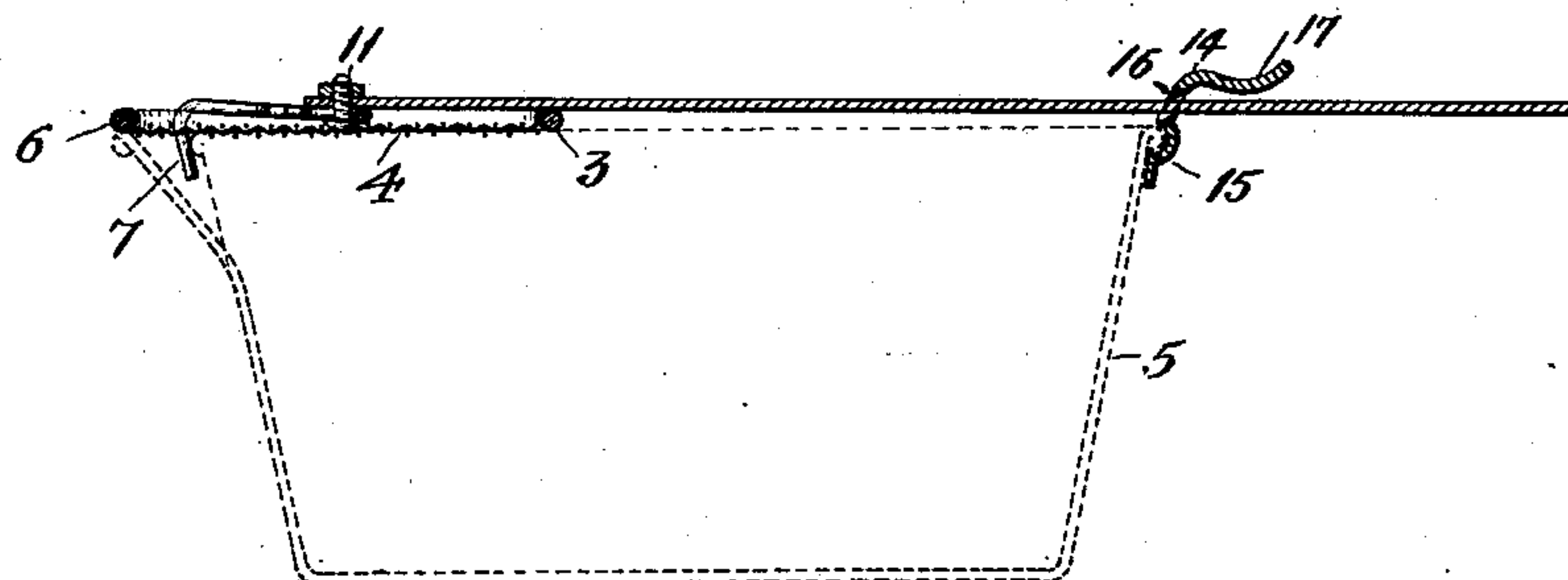


Fig. 5.

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UNITED STATES PATENT OFFICE.

LEONARD H. DES ISLES, OF CAMBRIDGE, MASSACHUSETTS.

STRAINER.

SPECIFICATION forming part of Letters Patent No. 688,397, dated December 10, 1901.

Application filed February 18, 1901. Serial No. 47,745. (No model.)

To all whom it may concern:

Be it known that I, LEONARD H. DES ISLES, a citizen of the United States, residing at Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Strainers, of which the following is a specification.

My invention is intended to provide a simple and practical strainer which may be readily attached to and detached from a kettle, stew-pan, or similar device when desired.

A strainer made in accordance with my invention is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the strainer secured to the top of a stew-pan. Fig. 2 is a section on the line xx in Fig. 1. Fig. 3 is a plan view of a slightly-modified form of strainer. Fig. 4 is a plan view showing another modification, and Fig. 5 is a section on the line yy in Fig. 4.

My strainer comprises, generally speaking, a perforated body portion or strainer proper, in combination with novel means for clamping said body portion to the top of the vessel with which it is to be used.

The perforated body portion 2 of the strainer may be of any desired construction; but it preferably consists of a frame 3, covered with wire-netting 4, the edge of which is wrapped around said frame or is otherwise secured thereto. In the form of strainer shown in the drawings one side of the frame 3 is curved to conform substantially to the outline of a portion of the top of a stew-pan or similar vessel 5, being provided with a projecting portion 6 to cover the nose of said vessel, while the inner side of said frame 3 is straight; but the particular form of the body portion 2 is not material so far as my invention is concerned.

My improved clamping device for securing the body portion 2 to the vessel 5 comprises two downwardly-projecting hooks or fingers 7, soldered or otherwise rigidly secured to the curved edge of the body portion 2, and thus forming practically a part thereof, and an arm 8, pivotally connected with said body portion at a point near enough to the hooks 7 so that it will always lie between the same and the center of any vessel to which the strainer is adapted to be applied, said arm 8 being pro-

vided with one or more downwardly-extending projections or fingers 9, adapted to engage the edge of the vessel 5 at a point substantially opposite to the hooks 7. The hooks 7 may conveniently be formed from the ends of a stiff piece of wire, the central portion 10 of the latter being bent to lie close to the top of the body portion 2 and provided with the pivot 11, on which the arm 8 turns. It is desirable, although not essential, to provide a considerable degree of flexibility and elasticity at some point between the hooks 7 and the arm 8, for a reason hereinafter described, and I have shown in the drawings several arrangements for accomplishing this result. Thus in Figs. 1 and 2 said central portion 10 is formed like a double S, as shown at 12, while in Fig. 3 the central portion 10^a is straight, and the desired flexibility is obtained by inserting a bow-spring 13 between the arm 8 and the pivot 11, said bow-spring being rigidly secured to said arm 8 and journaled on said pivot 11, as shown. In Fig. 4 said central portion is corrugated, as shown at 10^b. The hooks 7 are sufficiently near each other to insure their engagement with one side of the vessel 5 regardless of its size, and in order to adapt my strainer to be used with vessels of different sizes I have shown in Figs. 1, 2, and 3 a number of projections 9, formed on the arm 8, preferably by stamping them from its substance and bending them downward, as shown. In place of having a number of such projections the arm 8 may be provided with a slotted clip 14, arranged to slide on said arm and having a downwardly-projecting end 15, which forms an adjustable finger adapted to engage the edge of the vessel, as shown in Figs. 4 and 5. In this form of the device the clip 14 is retained in any desired position on the arm 8 by the binding of the edges of the slot 16 on said arm in a well-known manner and is released by pressing down the thumb-piece 17, said slot being sufficiently large to permit the clip 14 to tilt the proper amount to accomplish these results.

To attach the strainer shown in Figs. 1, 2, and 3 to a vessel, the body portion 2 is laid over one edge thereof, with the hooks 7 projecting downward and engaging the side of said vessel. The arm 8, which has previously been moved a little to one side of its central

position, is then placed against the top of the opposite edge of the vessel, thus bringing said edge in front of one of the projections 9, and is moved toward the position shown in Fig.

5 1, whereupon, since the point at which the arm 8 is pivoted to the body portion 2 is located between the hooks 7 and the center of the vessel, said movement of the arm 8 will cause that projection 9 which lies next outside
10 of the edge of the vessel to bind against the same, thereby clamping the vessel between said projection and the hooks 7 and securing the strainer firmly in place.

By providing a sufficient number of projec-
15 tions 9 my strainer may be adapted to be attached to vessels of any desired size, the function of the spring connection between the arm 8 and the body portion 2 being to provide for the movement of said arm into its
20 central position even though the edge of the vessel be engaged by a projection 9 at some distance from said position. The force of the clamping action is thus measured by the tension of said spring connection when em-
25 ployed.

To apply to a vessel that form of my device which is shown in Figs. 4 and 5, after the arm 8 has been swung a little to one side and the body portion 2 has been applied to the ves-
30 sel the clip 14 is slid against the opposite edge of the vessel and the arm 8 is moved toward the position shown in Fig. 4, whereupon said clip 14 is caused by the engagement of its end 15 with the side of the vessel to bind against
35 the arm 8, as above explained, and said end 15 thereupon clamps the vessel between itself and the hooks 7 in the manner above set forth.

I do not consider my invention to be limited to any particular form of body portion
40 nor to any particular arrangement for pivotally connecting the arm 8 thereto, since these details may be varied at will, nor is my invention limited to the provision of a flexible connection between the arm 8 and the body
45 portion 2, since such connection may be

omitted, if desired, without materially affecting the efficiency of the device, particularly when the adjustable clip shown in Figs. 4 and 5 is employed.

I claim as my invention—

1. A strainer comprising a perforated body portion provided with two downwardly-projecting hooks adapted to engage one side of a vessel, in combination with an arm pivotally connected with said body portion and
55 provided with a downwardly-extending finger adapted to engage the opposite side of said vessel, substantially as described.

2. A strainer comprising, in combination, a perforated body portion having two downwardly - projecting hooks rigidly secured thereto and adapted to engage one side of a vessel, an arm provided with a downwardly-extending finger adapted to engage the opposite side of the vessel, and a flexible connection between said arm and body portion, said
65 arm being pivotally attached to said connection.

3. A strainer comprising a perforated body portion, a wire secured thereto and having
70 its ends formed into downwardly-projecting hooks, and an arm pivoted to said wire and provided with one or more downwardly-extending fingers, for the purpose set forth.

4. A strainer comprising a perforated body
75 portion, a wire rigidly secured thereto and having its ends formed into downwardly-projecting hooks, the central portion of said wire being bent to form a spring and provided with a pivot, and an arm journaled at one
80 end on said pivot and provided with a number of downwardly - extending projections, substantially as described.

In testimony whereof I have hereunto subscribed my name this 11th day of February,
85 1901.

LEONARD H. DES ISLES.

Witnesses:

E. D. CHADWICK,
ELLEN F. COLLINS.