No. 633,912. Patented Sept. 26, 1899.

A. B. SHEPPARD.

DEVELOPING TRAY.

(Application filed Feb. 24, 1899.)

(No Model.)

Fig 1

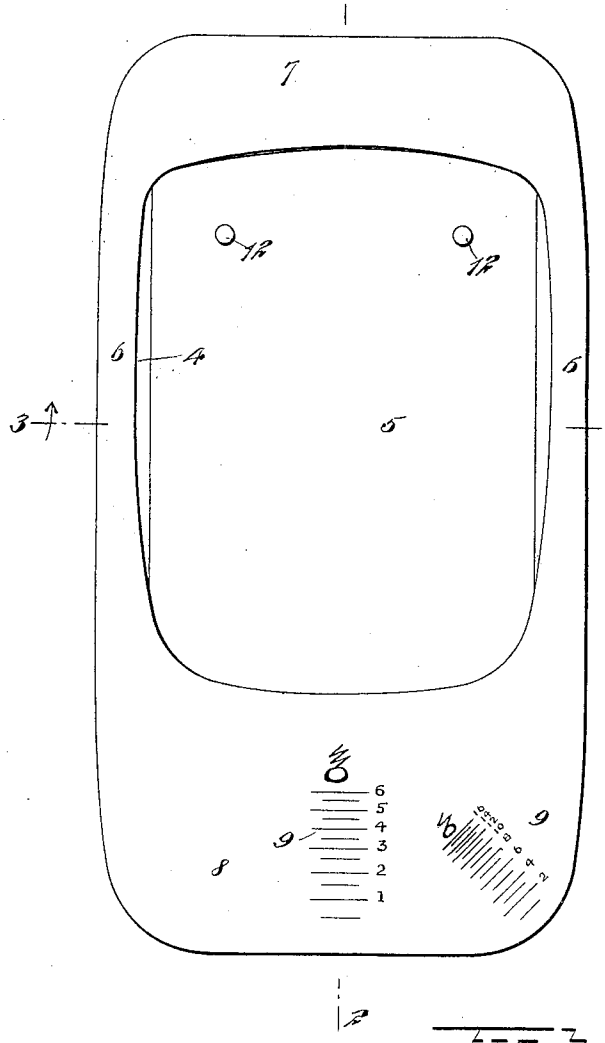


Fig 2

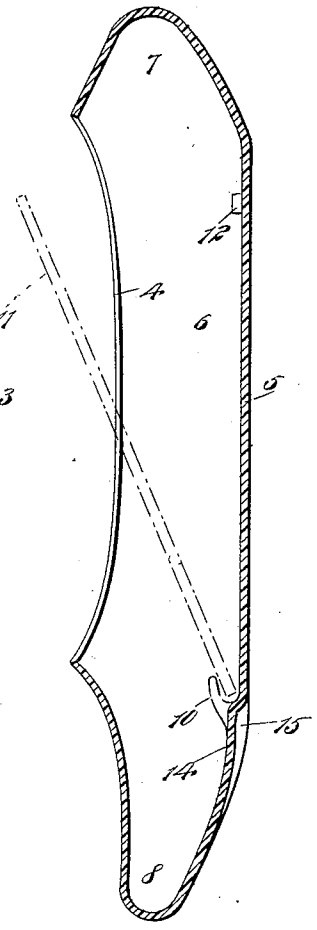
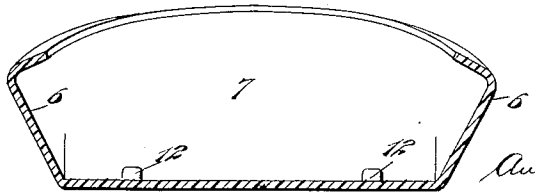


Fig 3



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AULEY BIDDLE SHEPPARD, OF SOUTH BURGETTSTOWN, PENNSYLVANIA.

DEVELOPING-TRAY.

SPECIFICATION forming part of Letters Patent No. 633,912, dated September 26, 1899.

Application filed February 24, 1899. Serial No. 706,691. (No model.)

To all whom it may concern:

Be it known that I, AULEY BIDDLE SHEPPARD, of South Burgettstown, in the county of Washington and State of Pennsylvania, have invented new and useful Improvements in Developing-Trays, of which the following is a full, clear, and exact description.

The purpose of this invention is to provide a developing-tray in which the solution may be measured and in which also the plates may be subjected to a more effective application of the solution without staining the hands of the operator and without the danger of spilling the solution.

This specification is the disclosure of one form of my invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the invention. Fig. 2 is a section on the line 2 2 of Fig. 1, and Fig. 3 is a section on the line 3 3 of Fig. 1.

The tray is formed of glass, so that the whole structure is transparent, and is shaped with an opening 4 in its top, which opening is of less area than the bottom 5 of the tray, which arrangement is produced by extending the sides 6 outwardly and upwardly and thence inwardly to form a partial top overhanging the bottom of the tray to prevent the splashing out of the solution. The inwardly-extending top of the tray forms at each end a cup, these cups being respectively designated 7 and 8, in one or the other of which the solution will be contained when the tray is placed on end—for example, when in the position shown in Fig. 2. The top of the tray at the point of the cup 8 is formed with two or any number of graduations 9 thereon, by which graduations the quantity of the solution placed in the tray may be determined, it being understood that for this purpose the tray should be held in the vertical position shown in Fig. 2, thus causing the solution to settle in the cup 8. It will thus be seen that this arrangement avoids the necessity of measuring the solution before it is placed in the tray.

The bottom of the tray is provided with two spurs 10, only one of which is shown in the drawings. (See Fig. 2.) These spurs are adapted to hold one edge of the plate. (Indicated by the dotted lines 11 in Fig. 2.) At the opposite end of the tray slight projections 12 are formed on the bottom, so that the plate when rested in the tray will bear on these projections, and thus be held out of contact with the bottom of the tray. The opening 4 in the top of the tray is so shaped that the plate may be introduced into the tray to be engaged by the spurs 10 and to bear on the projections 12, and this opening is also tapered slightly toward the cup 8, so that when the tray is canted forward slightly from the position shown in Fig. 2 and the plate 11 thrown outward, as said view shows, the side edges of the plate will engage the side walls of the opening 4 and the plate will be prevented from falling completely out of the tray. This construction enables the plate to be freely examined during the process of development.

At the end of the tray beneath the cup 8 the bottom of the tray is formed with a raised portion 14, (see Fig. 2,) which is broken by two downwardly-extending ribs 15, only one of which is shown in the drawings. (See Fig. 2.) These ribs run longitudinally with the tray and each describe a like curve, which merges into the bottom surface of the tray. Each end of the tray is curved upward in the form of a rocker, thus permitting the tray when placed on a table or other level surface to be pitched or rocked longitudinally for the purpose of effectually washing the plate with the solution. The ribs 15 permit the tray to move easily in this pitching movement, while at the same time the raised portion 14 serves, when the tray is in horizontal position, to throw all of the solution in the vicinity of the plate, causing the plate to be effectually washed and avoiding the retaining of any of the solution at points of the tray where it will serve no useful purpose.

The plate is introduced into the tray by moving the plate longitudinally toward the spurs 10 and in a line inclined with reference to the bottom of the tray, so that one end edge of the plate is engaged with the spurs, whereupon the plate may be dropped through the opening 4 upon the projections 12. The re-

moval of the plate is effected by a reversal of this operation.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A developing-tray having overhanging sides forming a partial top for the tray, the opening in the top of the tray being at one end of less width than that of the plate to be held, said tray being provided with lugs on its bottom at the end having the top opening contracted, whereby the plate can be tilted and held in an inclined position, as set forth.

2. A developing-tray, having portions of its sides overhanging the bottom of the tray and forming an opening in the top of the tray through which a plate may be inserted, the bottom of the tray having hook-shaped spurs thereon adapted to be engaged by one edge of the plate so as to hold the plate in an inclined position in the tray when the tray is moved to a vertical position.

3. A developing-tray provided near one end in its bottom with a spur having an overhanging portion and against which spur one edge of a photographic plate is adapted to rest, and at the opposite end with a projection upon which the other end of the plate is adapted to rest, substantially as described.

4. A developing-tray, having a raised portion in the bottom thereof, causing the solution to flow off of said raised portion, and a downwardly-extending rib formed on the under side of the bottom of the tray at the raised portion thereof, such rib merging into the main portion of the bottom.

5. A developing-tray having overhanging sides to form a partial cover for the same, the ends of the bottom being gradually curved upward in the form of a rocker, whereby the tray may be rocked back and forth to properly dispose the solution and without spilling the same, as set forth.

6. A developing-tray having overhanging sides forming a cup at one end of the tray and provided in its bottom at the end having the cup with a spur having an overhanging portion, substantially as and for the purpose set forth.

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Witnesses:
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