No. 736,766. PATENTED AUG. 18, 1903.

G. T. McKINNEY.

PHOTOGRAPHIC TRAY.

APPLICATION FILED MAY 29, 1903.

NO MODEL.

Fig. 1

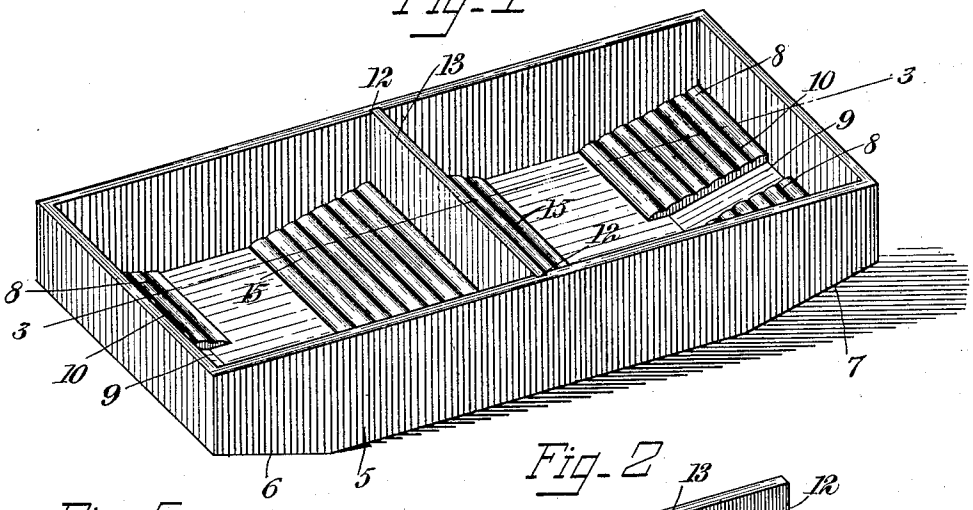


Fig. 2

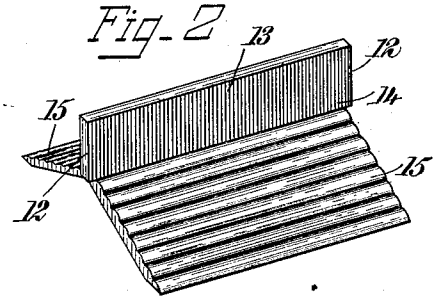


Fig. 5

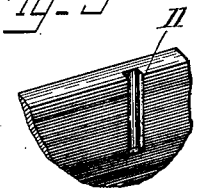


Fig. 3

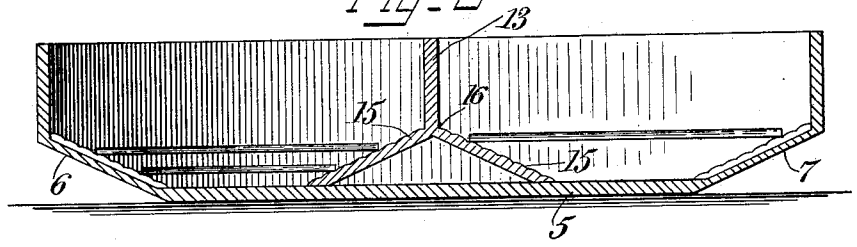
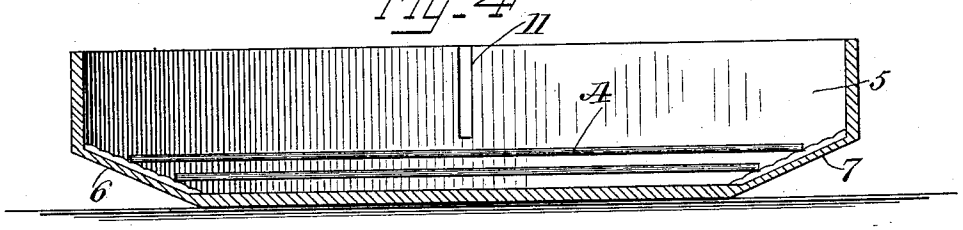


Fig. 4



WITNESSES:

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No. 736,766. Patented August 18, 1903.

UNITED STATES PATENT OFFICE.

GEORGE T. McKINNEY, OF WALLA WALLA, WASHINGTON.

PHOTOGRAPHIC TRAY.

SPECIFICATION forming part of Letters Patent No. 736,766, dated August 18, 1903.

Application filed May 29, 1903. Serial No. 159,295. (No model.)

To all whom it may concern:

Be it known that I, GEORGE T. McKINNEY, a citizen of the United States, and a resident of Walla Walla, in the county of Walla Walla and State of Washington, have invented new and useful Improvements in Photographic Trays, of which the following is a full, clear, and exact description.

This invention relates to certain novel and useful improvements in trays of the character generally known as "photographic" trays and employed by photographers for the purpose of fixing photographic plates or films.

The principal object of the present invention is to provide a device of the character above specified which will enable plates or negatives of various sizes to be thoroughly fixed without employing a great amount of solution.

A further object of the present invention is to provide the improved tray with peculiarly-formed partitions or plates, which shall enable the negative to rest with the film side downward without touching the bottom of the tray, thereby obviating the possibility of the negative being injured or damaged by scratching or the like.

A further object of the invention is to provide a tray designed to contain a number of plates at one time, thereby avoiding the necessity of using a large number of separate trays.

With these and other objects of a similar nature in view the invention consists in the construction, combination, and arrangement of parts, as is described in this specification, delineated in the accompanying drawings, and set forth in the appended claims.

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 figures.

Figure 1 is a perspective view of a photographic tray embodying my improvements. Fig. 2 is a similar view of the central removable partition thereof. Fig. 3 is a longitudinal vertical sectional view taken on the line 3 3 of Fig. 1. Fig. 4 is a similar view showing the center partition removed, the tray being shown in condition for receiving large negatives or plates; and Fig. 5 is a detail view of a portion of a side of the receptacle or tray, showing the incision or groove therein, in which is designed to be seated the end of the partition.

In the accompanying drawings, wherein I have illustrated an embodiment of my invention, 5 designates the tray or fluid-receptacle, which may be of any desired sort or character, being preferably formed of hard rubber or the like. This tray, which in the present instance is of a rectangular form or box shape, has the transverse end portions 6 and 7 thereof beveled or inclined, so that the tray is relatively higher or deeper at its central portion than at said ends. Resting upon each of these inclined end portions are a number of sheets or plates 8, there being preferably two plates to each end portion, the plates of each end portion being spaced apart centrally, so that an open passage-way or groove 9 lies between such plates. These plates are corrugated or ribbed, as shown at 10, for a purpose to be hereinafter described. Each longitudinal side of the tray or box is provided with a vertical groove or slot 11, said slots being arranged approximately centrally of said sides and are adapted to receive in interlocking engagement the end portions 12 12 of the vertical wall or board 13, forming a part of the partition 14. This central partition is also formed with two downwardly-inclined oppositely-extending plates 15 15, which are corrugated in a manner similar to the end plates 8, said plates at their point of convergence 16 supporting the aforementioned vertical wall 13. The construction and arrangement of the plates are such that the partition, which is clearly shown in Figs. 1 and 2, may be readily removed or slipped from the tray. For instance, if it is desired to fix relatively large plates, such as are shown at A in Fig. 4, the central partition or diaphragm 14 is removed and the plates are placed in the tray in such manner that the transverse end portions thereof rest upon the inclined corrugated end portions of the tray. If, however, smaller plates are to be developed, the partition may be inserted so that it lies in the position shown in Figs. 1 and 2—that is, transversely or crosswise of the tray—and small plates may be placed therein, so that the ends or side portions thereof are supported between the inclined corrugated sides of the partition and

the aforesaid corrugated end portions of the plate.

There are many advantages incident to my improved tray, which may be readily apparent to those skilled in the art to which my invention appertains. For instance, the negatives may be fixed with the face of the film side downward, which is an important feature, as the plates are held upward from the bottom of the tray by the inclined corrugated sides, so that the film cannot be scratched, and at the same time the solution within the tray has an opportunity of acting upon the silver of the film to release the same, such silver falling to the bottom of the tray and is thus prevented from lying upon the film and spoiling the appearance of the negative. This latter disadvantage is especially apt to occur when using the ordinary form of tray, especially if the solution becomes old and discolored. By holding the plates out of contact with the bottom the possibility of the films being scratched or destroyed by small grains of sand or similar granulated material which may happen to be within the tray is obviated.

There are many other advantages incident to my improved tray, but they will be evident, so that it is unnecessary to dwell upon the same here in detail.

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

1. A device of the class described, comprising a tray, and a partition therefor, said partition having inclined converging side members, and a vertical wall member supported at the point of convergence of the side members, substantially as set forth.

2. A device of the class described, comprising a tray having the transverse end portions thereof inclined, and a removable partition for said tray, said partition comprising oppositely-extending inclined corrugated members, and a vertical member supported by the corrugated members, said vertical member being designed when in position within the tray to seat in grooves formed in the sides of said tray, substantially as set forth.

3. A photographic tray provided with a plurality of synclinal plate-supporting members, certain of said members being removable, substantially as set forth.

4. A photographic tray provided with synclinal corrugated, plate-supporting members, the corrugations forming ledges upon which the edges of the plates may rest, substantially as set forth.

5. The combination of a tray having inclined end portions, and a plurality of corrugated plate-supporting members spaced apart and resting upon the inner face of each of said inclined end portions, substantially as set forth.

6. The combination of a tray, and synclinal corrugated plate-supporting members spaced apart and abutting against the inner face of each of said end portions, substantially as set forth.

7. The combination of a tray, a plurality of synclinal plate-supporting members arranged transversely of said tray, and a vertical wall member resting upon certain of said plate-supporting members, substantially as set forth.

8. The combination of a tray, a plurality of inclined plate-supporting members arranged transversely of the tray at one end thereof, said members being spaced apart at their adjacent side edges, and a second inclined corrugated plate-supporting member arranged transversely of the tray, intermediate the ends thereof, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE T. McKINNEY.

Witnesses:

S. E. KING,

FLORA C. STOCKWELL.