

W. & W. H. Lewis,  
 Photographic Bath,  
 No 16,242, Patented Dec. 16, 1856.

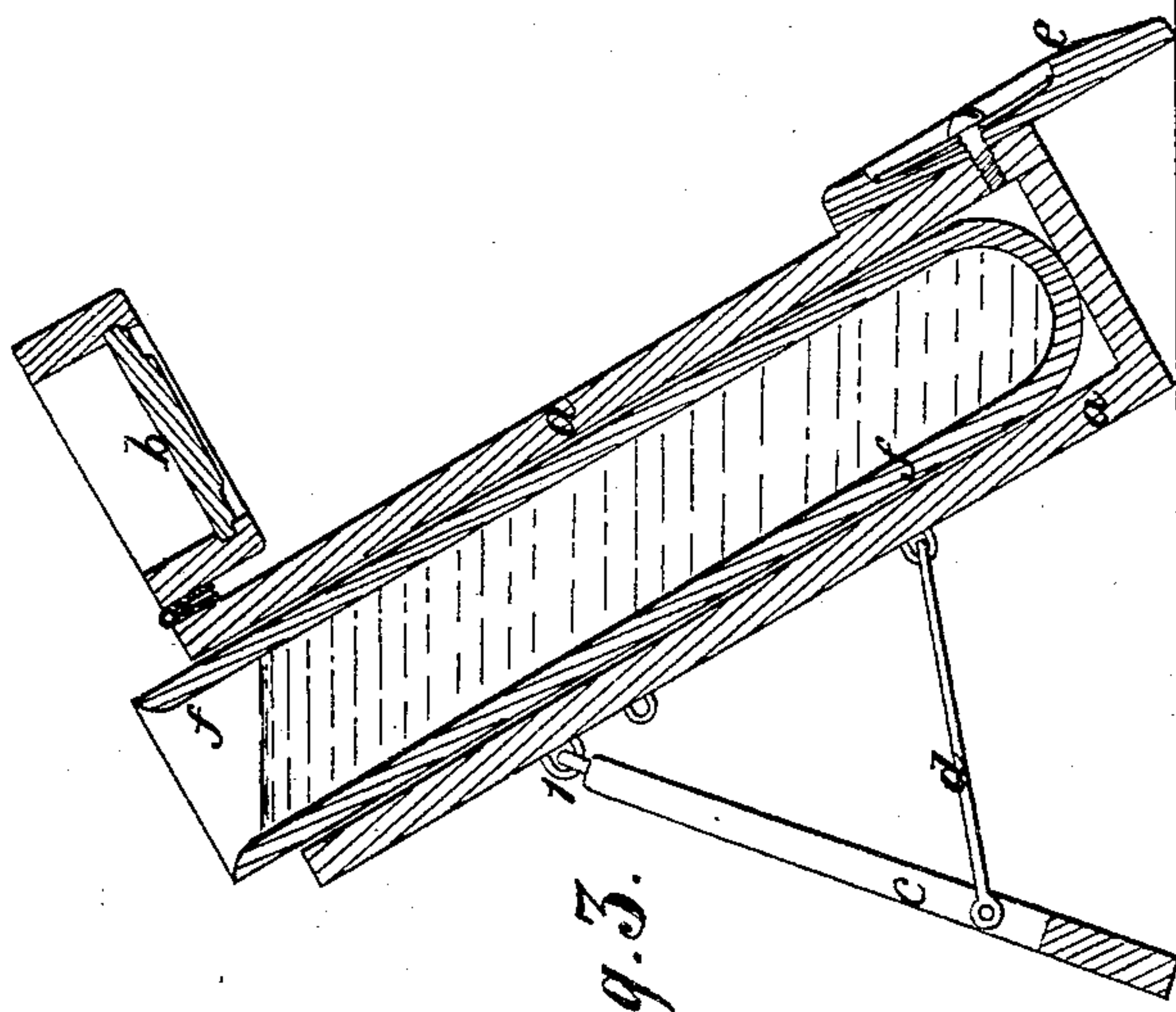


Fig. 3.

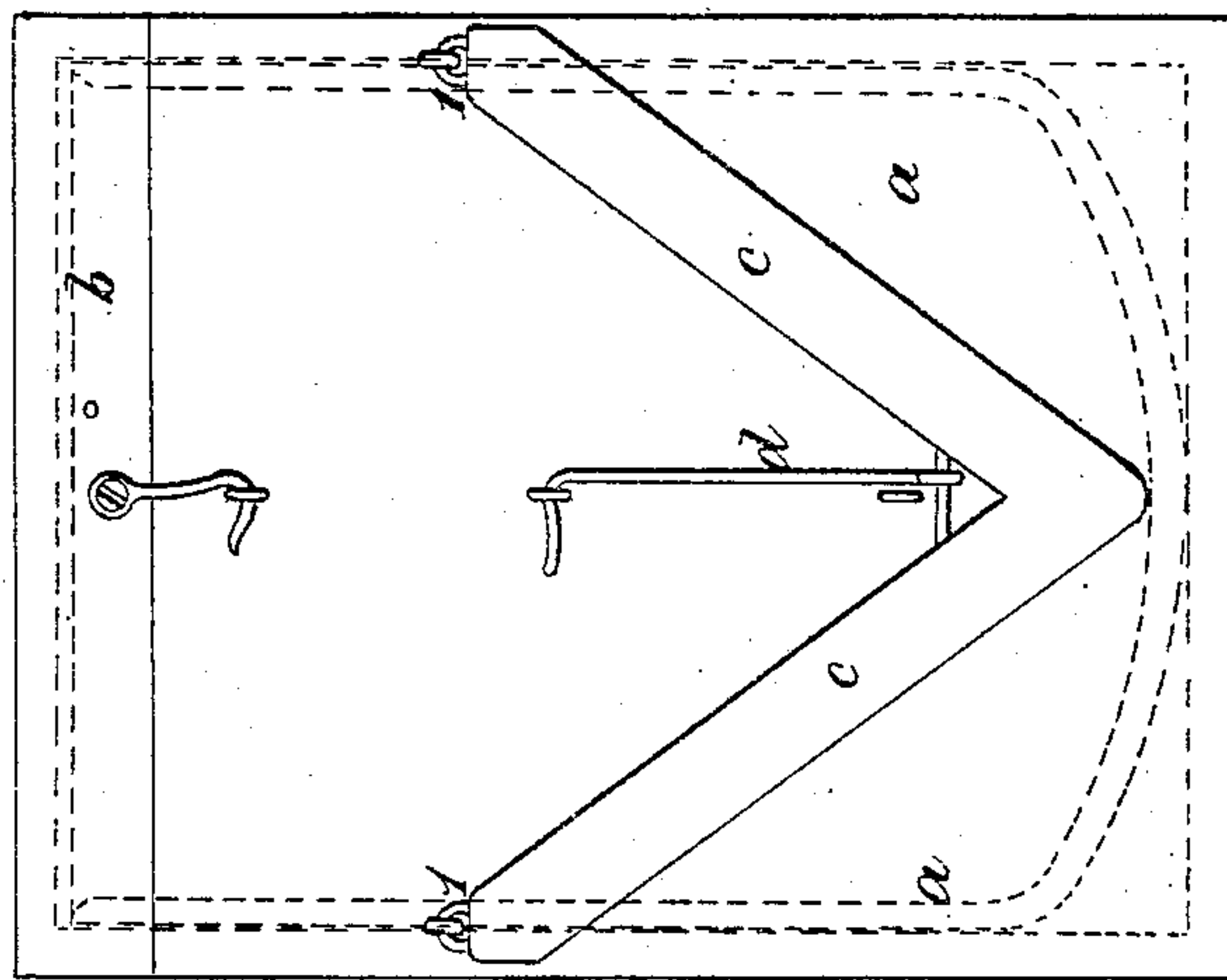


Fig. 2.

Witnesses  
 Samuel W. Sewell  
 Thomas G. Harold

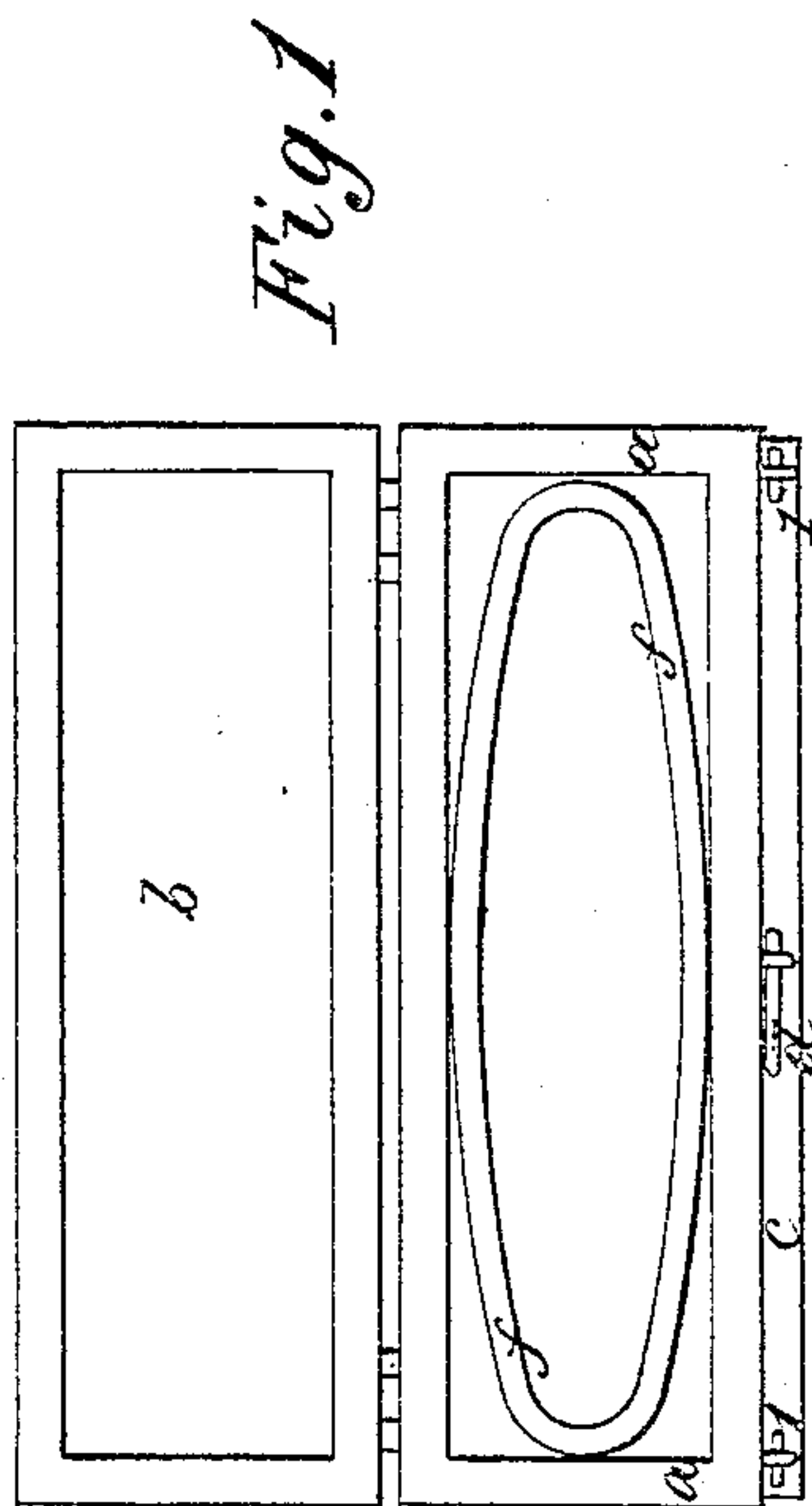


Fig. 1.

Inventors  
 Wm Lewis  
 W H Lewis



# UNITED STATES PATENT OFFICE.

WILLIAM LEWIS AND WILLIAM H. LEWIS, OF NEW YORK, N. Y.

## IMPROVEMENT IN PHOTOGRAPHIC BATHS.

Specification forming part of Letters Patent No. 16,242, dated December 16, 1856.

*To all whom it may concern:*

Be it known that we, WILLIAM LEWIS and WILLIAM H. LEWIS, of the city, county, and State of New York, have invented, made, and applied to use certain new and useful Improvements in Nitrate-of-Silver Baths for Photographs, &c.; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a plan of our improved bath as open. Fig. 2 is an elevation of the same as shut up for preservation or transportation, and Fig. 3 is a cross-section of said bath as in the inclined position ready for use.

Similar marks of reference denote corresponding parts.

In developing photographic and similar pictures, where the plate is immersed in a bath of nitrate of silver or similar chemical solution the bath is inclined for the convenience of entering and withdrawing the plate, and for that purpose a fixed rest has been employed that is both unhandy and cumbersome. Besides this, if the bath be not considerably inclined any slight touch or agitation may, and often does, cause the bath to right itself, and in coming up on its bottom sways and spills the costly nitrate of silver over the top of the bath.

Besides the above inconvenience in using the nitrate-of-silver bath, there are other difficulties attendant on the construction of the bath itself. Gutta-percha baths, made of sheet gutta-percha or rubber and cemented at the angles, have been used, and also earthenware pots; but these have been found unreliable, because the former was liable to leak and the latter was affected by the chemicals, in either case involving considerable cost and loss of the silver. Another source of trouble is in the shape of the bath itself, which in some cases does not prevent the surface of the picture being accidentally damaged by touching the bath or prevent the same becoming discolored by sediment. To effect this latter object, projections have been formed at the bottom of the gutta-percha bath; but these collect dirt and are not adapted to all the sizes of plates.

The nature of our invention, as distin-

guished from the foregoing, consists in the use of a movable bracket attached to the side of the bath, combined with a button on the opposite side, which retain the bath in the inclined position and prevent the possibility of spilling the nitrate of silver, and also in the use of a deep and flattened glass pot or bath, the sides and bottom of which are of a curved form. Thereby the square glass or plate, however carelessly handled, can only touch on the edges or corners, preserving the picture from any injury, either from contact with the bath in entering or withdrawing or from stain by contact with any sediment, because such sediment will always be in the lowest part of the curved bottom of the pot, to which point the square plate cannot descend.

In the drawings, *a* is a wooden box of the required size, provided with a lid or cover *b*.

*c* is a movable leg hinged or jointed to the side of the box at 1 1, and of the necessary length to sustain the pot in the desired inclined position, and *d* is a hook or strut to keep said leg in place. If this leg alone were used, the bath might by any jar or touch right itself on its bottom, swaying over the contents. To avoid this we use the button *e* on the opposite side to the leg *c*, which when turned down until it takes the table or bench will securely retain the bath in its inclined position.

*f* is the glass pot within the box *a*, formed, as shown in Figs. 1, 2, and 3, as curved at both the sides and bottom for the purposes before enumerated, and being of one solid piece and not liable to the action of chemicals, preserves the nitrate of silver (which is costly) as well as protecting the picture.

We do not claim a hinged leg or support to the bath separately; but we are not aware that the hinged leg and button have ever before been combined together for the purposes specified. Neither do we claim a glass bath in itself, as baths have heretofore been made of plates of glass cemented together; and, also, circular vessels have been made use of, and elongated baths of gutta-percha have been used, formed with one curved side; but we are not aware that solid glass baths have ever before been formed in a flattened or elongated shape with the sides and bottom in a curved shape, as and for the purposes specified. Therefore

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

1. Retaining the nitrate-of-silver bath in the desired inclined position by the combined operation of the leg *c* and button *e*, for the purposes and as specified.

2. The solid glass pot *f*, when formed with the curved sides and bottom for the purpose of protecting the plate from injury by contact

with the bath or any sediment, in the manner specified.

In witness whereof we have hereunto set our signatures this 23d day of October, 1856.

WILLM. LEWIS.  
W. H. LEWIS.

Witnesses:

LEMUEL W. SERRELL,  
THOMAS G. HAROLD.