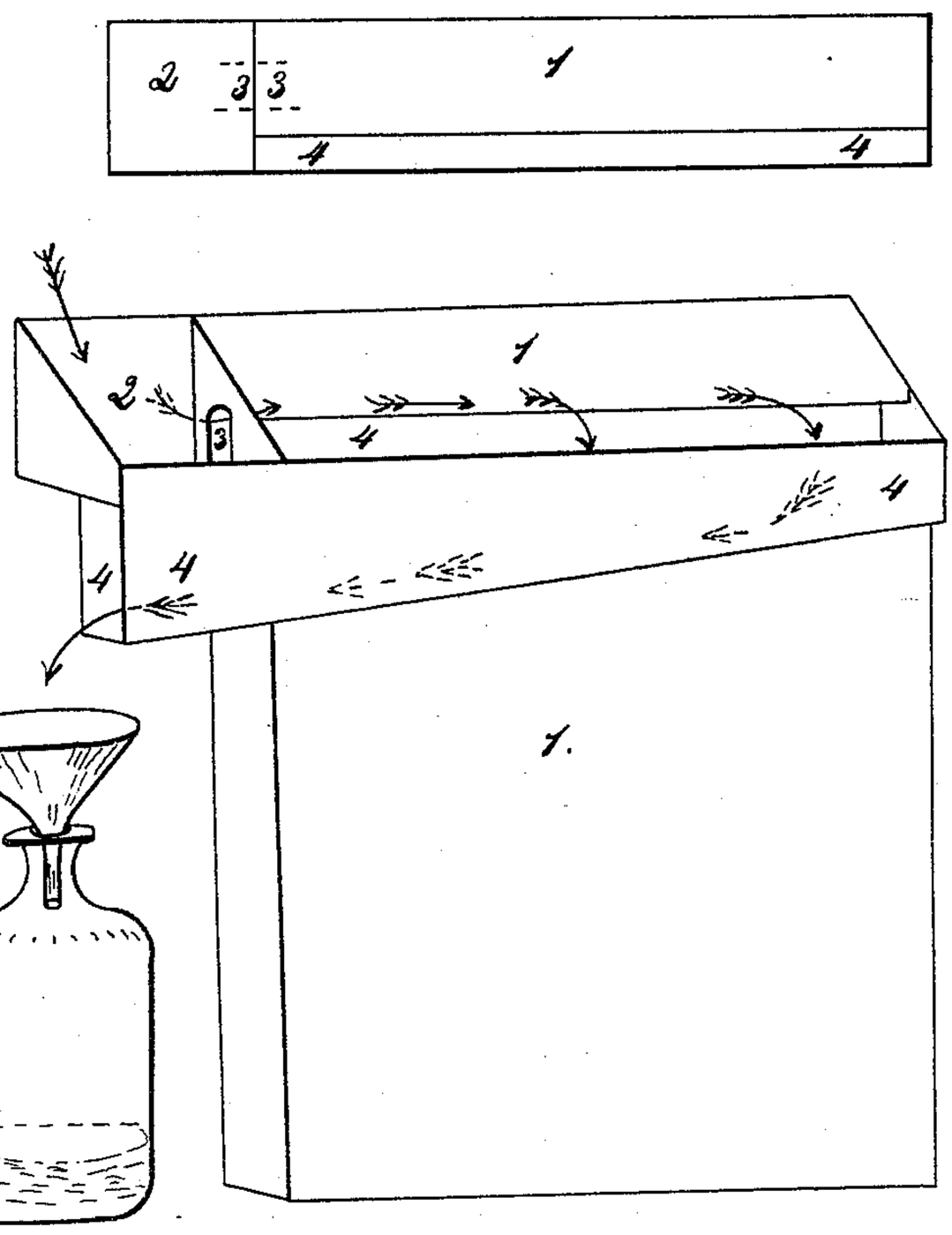
I. Rehn,

Photographic Bath.

No. 13,885. Patented Dec. 4, 1855.

Fig. 1.



UNITED STATES PATENT OFFICE.

ISAAC REHN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVED PHOTOGRAPHIC BATH.

Specification forming part of Letters Patent No. **13,885**, dated December 4, 1855.

To all whom it may concern:

Be it known that I, ISAAC REHN, of the city of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Baths for Photographic Operations; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing, and to the figures marked thereon.

In photographic operations one of the greatest difficulties experienced is in consequence of a film or scum arising to the surface of the solutions in which are to be immersed the plates or paper, as the case may be, and which scum, adhering to the surface of the plate, causes a stain, which not only greatly impairs the perfection of the pictures, but in many instances entirely spoils them. To remove this scum many efforts have been made, none of which have been successful, except by the following method, which renders that part of the photographic process entirely successful and free from failure.

The nature of my invention is as follows: I construct a reservoir with one wall about one and a half inch higher than the other. Along the lowest side or wall is attached a conducting-trough, to which is attached a spout for the purpose of conducting the liquid into a proper receptacle. At the top and at one side of this reservoir I place a receiving-chamber into which is to be poured the solution for the filling and overflow of the reservoir. At the bottom of this receiving-chamber I make an opening communicating with the reservoir at the water-line of the same or such other point as may best effect the desired object.

The operation of this bath is as follows: The reservoir 1, being filled with solution and supposing it to have been used, is covered with a film, as above mentioned. By pouring some additional solution into the receiver 2 the current passes through the opening 3 into the reservoir 1, causing the fluid to flow over the lower wall of the reservoir 1 into a conducting-trough 4, along which it is carried to a proper receptacle, from which it is to be again used, as before. The flow of the current over the wall of the reservoir into the conducting-trough carries with it all the scum or film that may be upon the surface of the solution, leaving it entirely clean. By use the reservoir will get loose pieces of coating from the plates immersed in it, which, from their greater specific gravity, sink to the bottom. The use of the receiving-chamber here becomes more apparent, for while its orifice is at the water-surface of the reservoir the solution may be made to overflow without disturbing the sediment at the bottom of the reservoir. Upon immersing the plate into the solution, after having overflown the bath, another film is liberated; but the bulk of the plate displaces a portion of solution, and by this displacement another overflow is occasioned and the fresh film carried away also.

Having thus described my invention and the mode of its operation, what I claim, and desire to secure by Letters Patent, is—

The overflowing bath with the conducting-trough and receiving-chamber or their equivalents, as set forth.

ISAAC REHN.

Witnesses:
MARTIN ROBERTS,
JAMES M. MOORE.