No. 709,336. Patented Sept. 16, 1902.

C. LAVAL.

TROUGH FOR SILVERING GLASS.

(Application filed May 9, 1902.)

(No Model.)

Fig. 1.

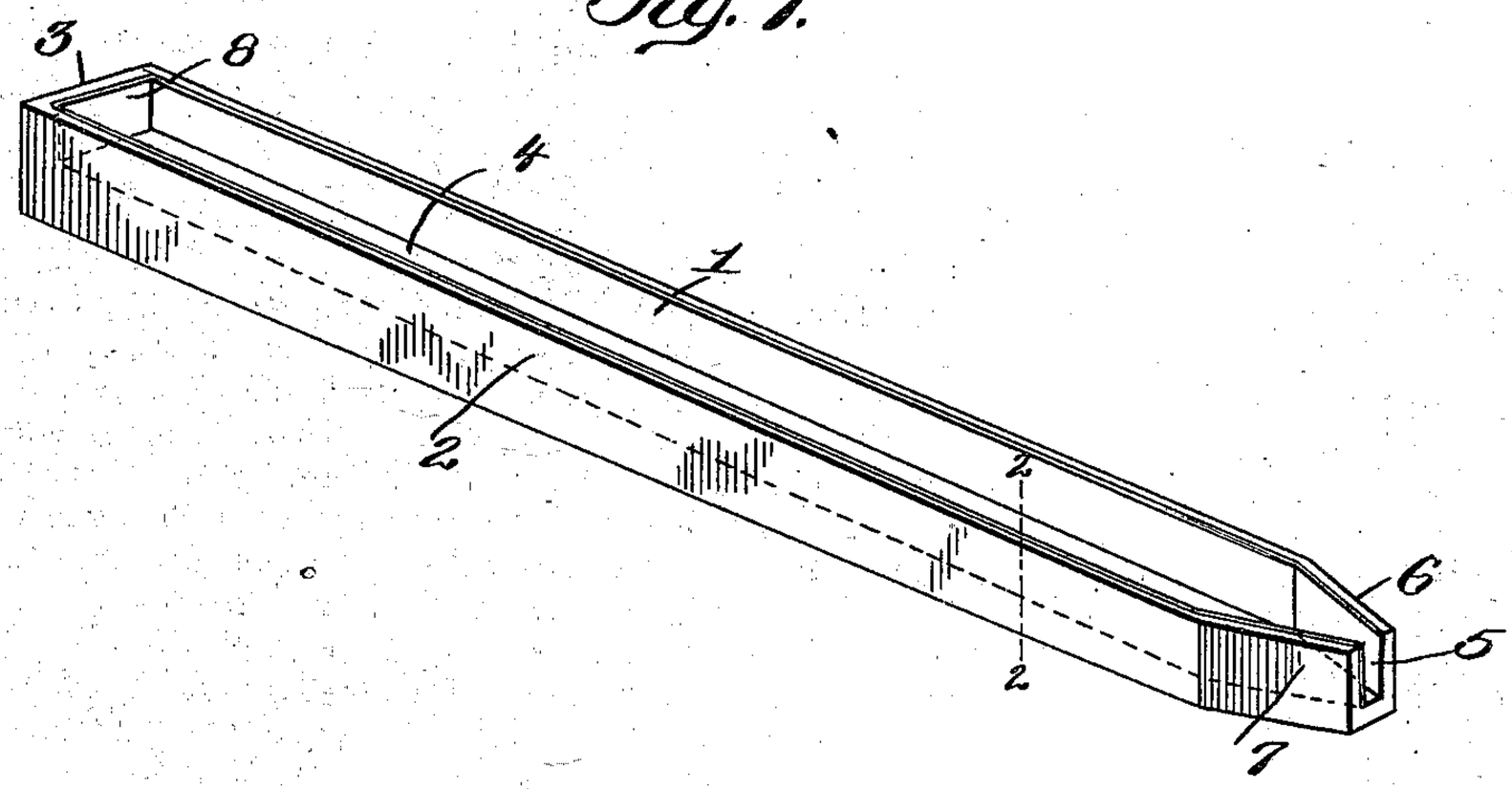


Fig. 2.

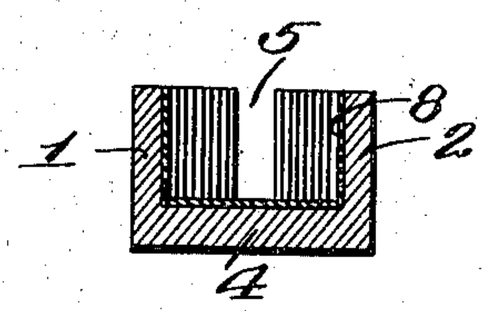


Fig. 3.

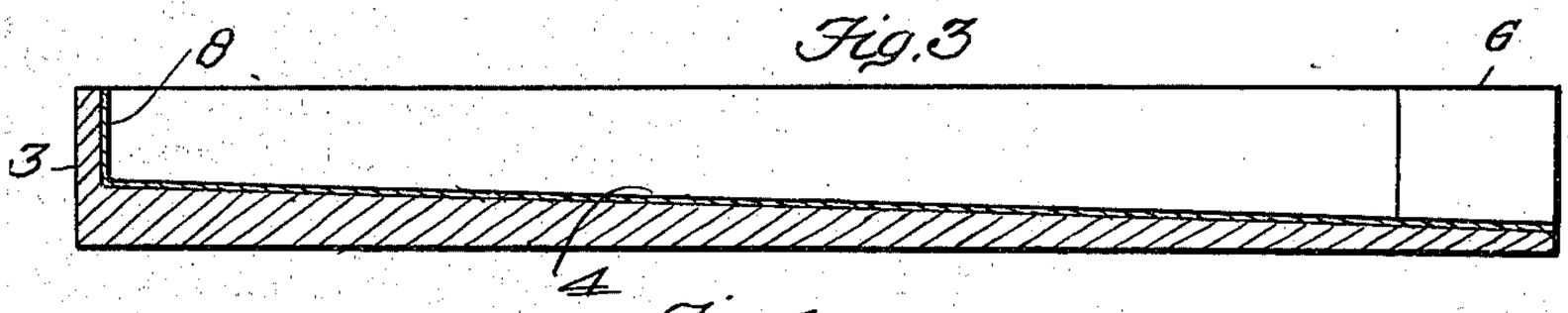
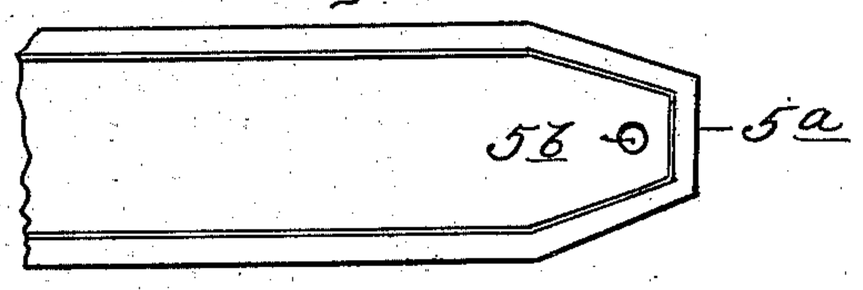


Fig. 4.



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UNITED STATES PATENT OFFICE.

CONSTANT LAVAL, OF PITTSBURG, PENNSYLVANIA.

TROUGH FOR SILVERING GLASS.

SPECIFICATION forming part of Letters Patent No. 709,336, dated September 16, 1902.

Application filed May 9, 1902. Serial No. 106,634. (No model.)

To all whom it may concern:

Be it known that I, CONSTANT LAVAL, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented new and useful Improvements in Troughs for Silvering Glass, of which the following is a specification.

This invention relates to certain new and useful improvements in troughs for silvering glass, and aims to provide a trough of this class by which a quantity of sheets of glass of any shape or description can be rapidly and efficiently silvered.

The invention further aims to construct a trough for the purposes above set forth which shall be extremely simple in its construction, strong, durable, efficient, and comparatively inexpensive to set up; and to this end it consists of the novel construction and arrangement hereinafter more specifically described, illustrated in the accompanying drawings, and pointed out in the claims hereunto appended.

In describing the invention in detail reference is had to the accompanying drawings, forming part of this specification, wherein like numerals of reference indicate corresponding parts throughout the several views, and in which—

Figure 1 is a perspective view of my improved trough. Fig. 2 is a section on the line 2 2 of Fig. 1. Fig. 3 is a longitudinal sectional view of the trough; and Fig. 4 is a plan view, broken away at one end, showing a modified form of discharge end for the trough.

Referring to the drawings by reference-numerals, the trough is preferably constructed of a single piece of material hollowed out to form side walls 1 2, the end wall 3, bottom 4, and contracted discharge-outlet 5; but, if desired, the trough may be constructed with separate side and end sections and bottom section, which are secured together in any suitable manner. Each of the side walls decreases in height from the closed to the open end of the trough, and each of the said side walls 1 2 has a portion of one end extending at an inclination toward each other, as at 6 7, respectively, to form the contracted outlet 5.

The trough, if desired, may be closed at both ends, as at 5^a 5^b, respectively, Fig. 4, and a suitable opening arranged in the bottom of the trough to form an outlet, as at 5^c, Fig. 4.

The bottom of the trough is so shaped as to conform to the inclination of the inwardly-extending inclined end of the side walls, or rather the bottom of the trough at the outlet end thereof is formed in a tapering manner to conform to the shape of the end of the side walls at the contracted outlet of the trough.

The bottom 4 of the trough extends downwardly at an inclination from the closed end to the outlet end of the trough—that is to say, the upper face of the bottom is formed at an incline extending downwardly.

The upper face of the bottom of the trough may extend in a horizontal manner and the trough pitched at an inclination, which would perform the same function as constructing the upper face of the bottom in an inclined manner.

The trough may be constructed of wood, metal, or other suitable material, and has the inner face of the side and end walls and the upper face of the bottom provided with a coating 8 of impermeable material, preferably rubber.

It is essential that the trough should be pitched at an inclination or the bottom formed at an inclination, so that when using the trough to silver or coat glass it will cause the coating or silvering solution to run over the surface of the glass which has been placed within the trough and coat the glass in a very efficient manner. This arrangement is far more advantageous than the ordinary way of laying the glass on a flat table and pouring the solution over the same, for the reason that if any dirt or dust falls on the plate to be silvered a spot is formed thereon, whereas by using the trough pitched in the manner set forth or formed with an inclined bottom nothing can remain on the sheet or plate of glass, as the solution travels from one end of the trough to the other and carries any foreign substance therewith. The solution is caught at the end of the trough and used over again until exhausted. As before stated, the trough can be provided with an opening at one end for discharging the solution therefrom.

By the employment of the trough a quantity of plates or sheets of glass can be coated

in a very few moments. This is caused by the rapidity of the solution traveling upon the glass and through the trough, owing to the inclination of the latter.

The coating given to the glass by the employment of the trough is an unusually-brilliant one, and, furthermore, as before stated, prevents any foreign substance from depositing on the surface, as the flow of the coating solution easily removes it, and the glass when coated has been found to be superior in power of reflection, as no obstruction whatever remains thereon. This also overcomes the using of a chamois-skin or other device for removing a foreign substance from the coated glass, as very often the glass is scratched or spoiled when cleaning it.

It is thought the many advantages of my improved trough for silvering and coating glass can be readily understood from the foregoing description, taken in connection with the accompanying drawings, and it will also be noted that a minor change may be made in the details of construction without departing from the general spirit of my invention.

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

1. A device used for silvering glass consisting of a trough having an inclined bottom and its inner face coated with an impermeable substance.

2. A trough consisting of a single piece of suitable material hollowed out and having a contracted discharge end, and a lining therefor of an impermeable substance.

3. A trough consisting of a single piece of suitable material hollowed out and having a contracted discharge end, and a lining of rubber therefor.

4. A device for silvering glass consisting of a trough having a contracted open end, and a lining therefor of an impermeable substance.

5. A device for silvering glass consisting of a trough having a contracted open end, and a rubber lining therefor.

6. A device for silvering glass consisting of a single piece of material hollowed out to form a trough with an inclined bottom and a closed and an open end, and a lining of an impermeable material therefor.

7. A device for silvering glass consisting of a single piece of material hollowed out to form a trough with an inclined bottom and a closed and an open end, and a lining of rubber therefor.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CONSTANT LAVAL.

Witnesses:
W. C. MORRISON,
L. M. SWARTZ.