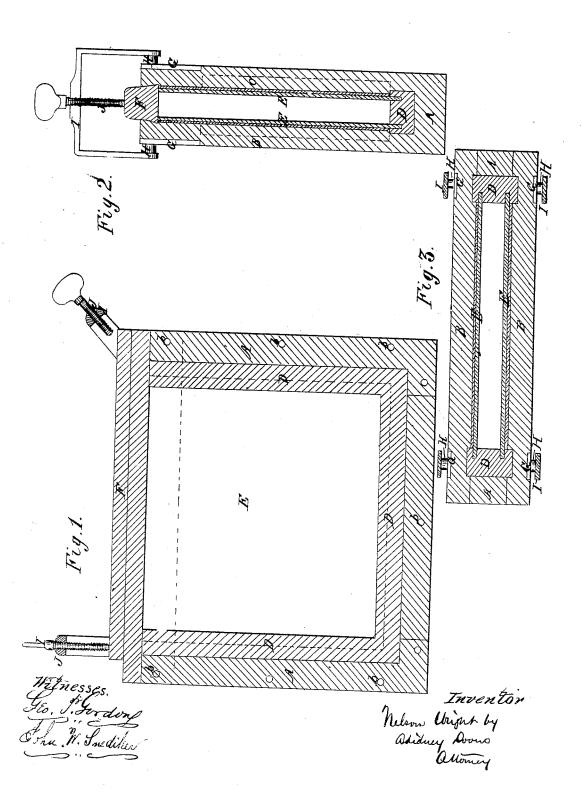
N. WRIGHT.
PHOTOGRAPHIC BATH.



UNITED STATES PATENT OFFICE.

NELSON WRIGHT, OF NEW YORK, N. Y.

IMPROVEMENT IN PHOTOGRAPHIC BATHS.

Specification forming part of Letters Patent No. 50,981, dated November 14, 1865.

To all whom it may concern:

Be it known that I, NELSON WRIGHT, of the city, county, and State of New York, have invented, made, and applied to use certain new and useful Improvements in Photographic Baths; and I do declare the following to be a full, clear, and correct description of the same, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, in which-

Figure 1 is a vertical section of my improved photographic bath; Fig. 2, an end view of the same; Fig. 3, a top view of the same.

In the drawings like parts of the invention are designated by the same letters of reference.

The present invention relates to certain improvements in the construction of a photographic bath patented by Bernhard Hufnagel, October 5, 1858, reissued March 19, 1861, and assigned to the present applicant.

The object of the present invention is to produce a silver-bath for photographic use which shall more perfectly than heretofore preserve the solution of silver deposited therein from all foreign action and allow the same to be used a great number of times and until all the silver is exhausted.

The nature of my invention consists in the use or employment of the rubber packing, arranged as hereinafter fully described, for the purpose fully set forth.

To enable those skilled in the art to make and use my invention, I will speak of the construction of the same.

A shows a framing, to which the front and back sides B are attached by screws b, so as to form together a close box or outer casing. The front and back sides are arranged with doors or panels C, which may be removed at any time for the purpose of examining the solution in the bath without the necessity of emptying said solution each time. Said doors or panels are so arranged that they may close perfectly tight and not admit any light to the interior of the box when closed.

Within the box, at each end of the same, I place a packing of vulcanized india-rubber, D, extending from one side of the box to the other, and extending from the top of the box and bottom I prefer should be made of one and the same piece of rubber, and it is grooved sufficiently to admit of the introduction of the plates of glass, which, when inserted within these grooves, form the sides of the bath.

The rubber packing, when arranged as shown, forms a perfectly-tight joint around the sides and bottom of the glass plates, and at the same time prevents the solution from coming in contact with the framing which contains and supports the plates of glass.

F shows the cover of the box, lined on its under side with a thin strip of rubber to prevent any injurious action of the solution upon the wooden part of the box, and to aid in the formation, when closed tightly upon the box, of a perfectly-tight box. This cover, instead of being hinged, as in the Hufnagel patent, is dovetailed, and slides snugly and readily within the ways formed to receive it at the top of the box. The rubber lining is made about the length of the plates of glass employed.

Attached to the box upon each side are the plates of metal G, provided with the journals H, upon which journals are held the yokes I, provided with the set-screws J. These yokes I swing readily upon the journals H, and, after the cover has been inserted to its full extent within the ways that receive it, are swung directly over the same, so that the set-screws may be depressed and bear directly upon the upper side of the cover until the cover be sufficiently depressed to form, with the rubber packing, a perfectly-tight box.

In constructing my improved bath the thickness of the glass plates and of the india-rubber packing is made, according to the size of the bath, from one eighth of an inch to half an inch thicker than the wooden frame or sides of the box. One of the sides is first firmly secured to the frame. The rubber packing is then placed in position, the plates of glass inserted within the grooved portion of the same. the opposite side added, after which, the other portions of the bath having been added, the same is ready for use.

The special features of my improvements are

that by extending the rubber so that the same shall not only be between the plates of glass, but extend beyond them, or, more properly speaking, that the plates of glass used shall to the bottom, also provided with a packing of speaking, that the plates of glass used shall vulcanized rubber. This packing for the ends be inclosed at their ends and bottom within

the rubber packing, as shown, I am enabled to form a more perfectly tight joint in the construction of a photographic bath than can be formed if the Hufnagel mode of construction be carried out. Again, I can use or employ a cheaper article of glass, and holding the same, as I do, securely within the rubber packing, the liability of the same to break, either by handling or transporting, is greatly reduced.

The second feature, which consists in attaching the yokes or clamps directly to the bath, enables me to depress the cover to its full extent more readily and certainly than if the removable clamps or yokes in common use be

employed, thus tending in a great degree to lessen the risk of leakage occasioned by a loose cover, or one not properly depressed.

Disclaiming so much of the present invention as may be covered by the Hufnagel patent, what I claim as new, and desire to secure by Letters Patent, is—

The rubber packing D, constructed and operating substantially as shown, for the purpose specified.

NELSON WRIGHT.

In presence of—
A. Sidney Doane,
W. I. Buck.