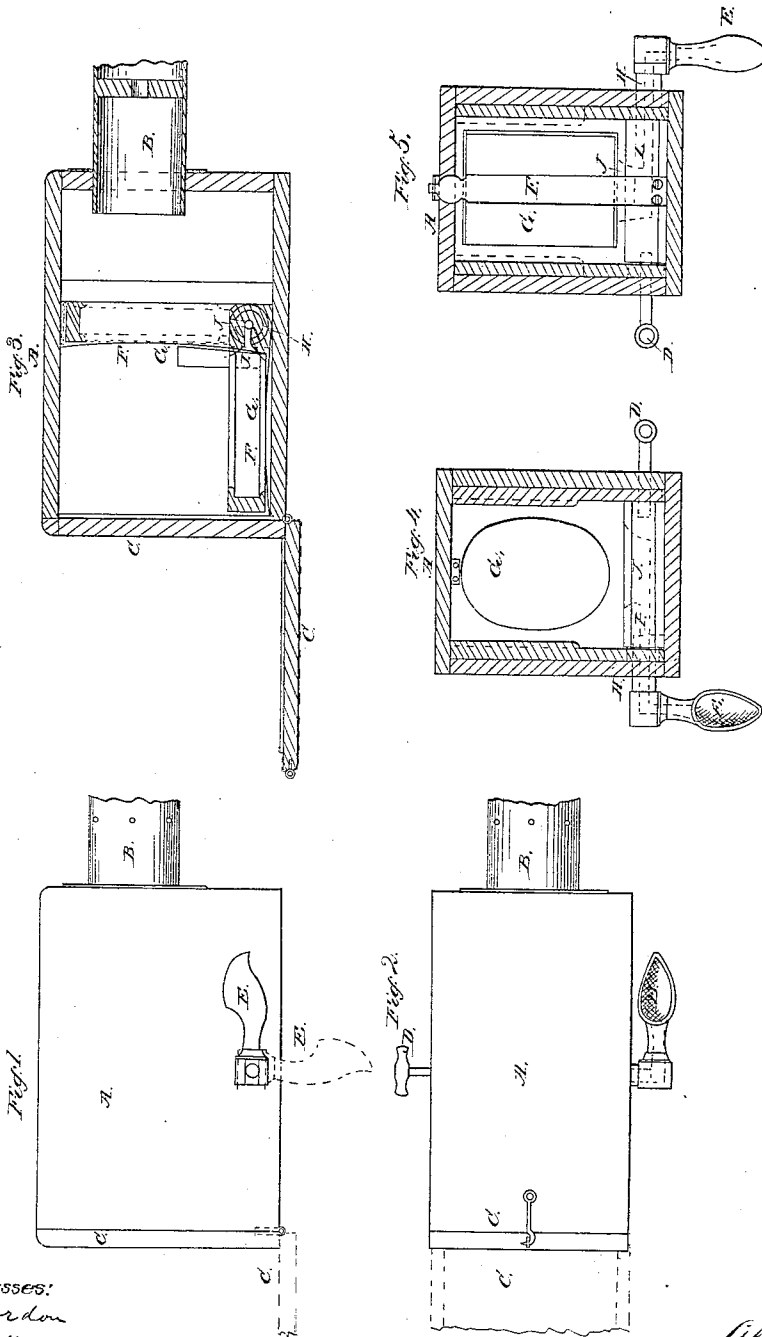


A. B. Wilson,

Camera Attachment.

N^o 34,800.

Patented Mar. 25, 1862.



Witnesses:
J. G. Gordon
Spencer Collins

Inventor:
Allen B. Wilson

UNITED STATES PATENT OFFICE.

ALLEN B. WILSON, OF WATERBURY, CONNECTICUT.

IMPROVEMENT IN PHOTOGRAPHIC CAMERAS.

Specification forming part of Letters Patent No. 34,800, dated March 25, 1862.

To all whom it may concern:

Be it known that I, ALLEN B. WILSON, of Waterbury, New Haven county, and State of Connecticut, have invented a new and Improved Photographic Camera; and I hereby declare that the following is a full, clear, and exact description of my invention, reference being had to the accompanying drawings, making a part of this specification, and the letters of reference marked thereon, in which the same letter represents the same thing in each figure.

Figure 1 is a side view of my improved photographic camera-box. Fig. 2 is a top view of the same. Fig. 3 is a sectional side view cut through the center. Fig. 4 is a front view of the combined back and plate-holder surrounded by the box in section and with the funnel and key attached. Fig. 5 is a back view of the same.

A represents the box; B, the camera-tube; C, the door; D, the key; E, the crooked-stem funnel; F, the back spring of the negative-plate holder; G, the negative-glass; H H, the journals; I, the channel through which the baths flow forth and back from the funnel to the negative-glass; J, the throat of the same.

The usual method of taking a negative for a photograph is thus: After placing the camera and adjusting the focus the plate for the negative is to be prepared. Being first coated with collodion, it is immersed in a bath of nitrate of silver, which immersion must take place in a dark-chamber. It is then placed in the camera and exposed to the object. After exposure the negative-plate is retaken to the dark-chamber and the picture developed by the second bath. After that it may be washed off in the light. This process, carried on out of doors, is not unattended with difficulties. First, the absence of a dark-room often necessitates carrying and pitching a tent; second, carrying baths to be unsealed and sealed at every move; third, wind and dirt endanger the bath when open and it is liable to be upset and lost in the dark-room or tent; fourth, working and keeping work clean in the dark and exposure of hands and clothing to the influence of chemicals, and, fifth, loss of time in traveling back and forth between the camera and the dark-chamber, first to sensitize and then to develop.

To save pitching a tent, a dark-room is some-

times obtained in a dwelling or out house not too remote from the object. The success of the undertaking is very much a matter of luck, depending upon a series of delicate manipulations carried on in the dark.

My purpose is to avoid these vexations and troubles and reduce the process by mechanical aids to so simple a matter that a gentleman may take a picture without soiling his fingers and the pedestrian be equipped with the stand in his hand, camera under his arm, and two vials and a few plates in his pocket. I accomplish it thus: I employ a box A, wide and high enough to contain the negative-plate holder K, in one end of which is the ordinary camera-tube B and at the other a door C, shutting tight, making the box a dark-chamber. Near the center of the sides of the box are bearings L L, in which the holders of the focus and negative glasses may turn up and down. They are turned by a key inserted from the outside of the box into a square hole in the left journals.

I combine the holder for the negative-glass and the bath in one instrument. This holder and bath is made of hard rubber to resist chemicals. It has a rubber-packed joint and spring and snap at the back to hold the negative-glass fluid-tight in its position. It is of course open in front to secure exposure. The right journal is hollow, and into it fits an adjustable crooked-stem funnel inserted from the outside of the box. It is crooked to keep out light and to facilitate pouring out as well as in through a single orifice in the journal.

To use the instrument, the focus-glass holder being placed in the bearings, the key turns it perpendicular and the focus is obtained. That glass being removed, the negative-glass is coated with collodion, placed on the rubber packing of the plate-holder, and secured by the spring and snap, the collodion toward the oval opening. It is then placed horizontally in the bearings in the box, the door shut, and the key inserted in the left and the funnel in the right journal. From a vial nitrate of silver is then poured into the crooked-stem funnel, through which it passes and flows evenly over the surface of the collodion-covered plate. After a proper time for sensitizing has elapsed the turning of the key turns the plate perpendicular and the nitrate of silver runs off the

plate and back through the crooked-stem funnel, which turns down as the plate assumes the perpendicular into the vial. The plate is then exposed to the object through the lens. The key turns the plate horizontal again, and the second or developing bath is introduced and removed, as was the first. The funnel and key may then be removed and the negative cleaned in the light. After removing the plate the bath-holder should be thoroughly cleansed. A tooth-brush is as handy an instrument as any for the purpose. The same result may be reached in this way: Place the combined bath and plate holder perpendicular, introduce a tube down its back to the bottom, admit thereby the bath under the plate, and let it flow upward. A slide with a fluid-tight joint will be required in front of the negative-glass, to be removed when the point of exposure is reached; also, a second tube at the bottom to draw off the baths.

The advantages of my method are obvious. I get rid of the slide and second fluid-tight joint, of the second tube, less silver is wasted, and every part of the plate equally immersed.

What I claim, and desire to secure by Letters Patent, is—

1. A negative-plate and bath holder having a hollow journal, channel, and throat, constructed and operating substantially as and for the purposes described.

2. The hollow journal described for introducing and withdrawing the baths.

3. The combination of negative-plate and bath holder having a hollow journal, channel, and throat as one instrument, with the crooked-stem funnel, constructed and operating substantially as described.

4. Giving the combined negative-plate and bath holder the capacity of assuming horizontal and perpendicular positions at will, in the manner and for the purposes described.

5. The combination of camera-box, crooked-stem funnel, hollow journal, channel, and throat, and fluid-tight holder, substantially as described.

ALLEN B. WILSON.

Witnesses:

S. J. GORDON,

GEO. H. COLLINS.