(No Model.)

S. C. SMITH.

PHOTOGRAPHIC PLATE LIFTER.

No. 572,663. Patented Dec. 8, 1896.

Fig 1.

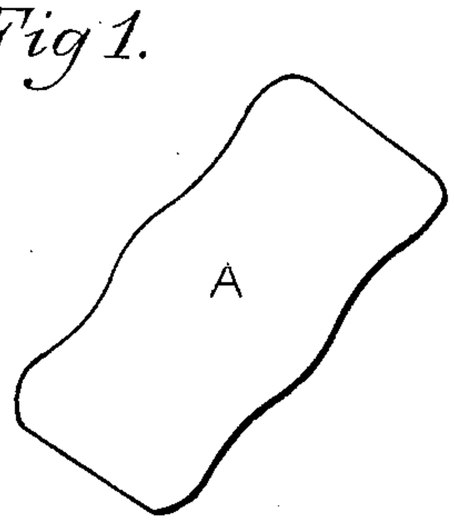


Fig. 2.

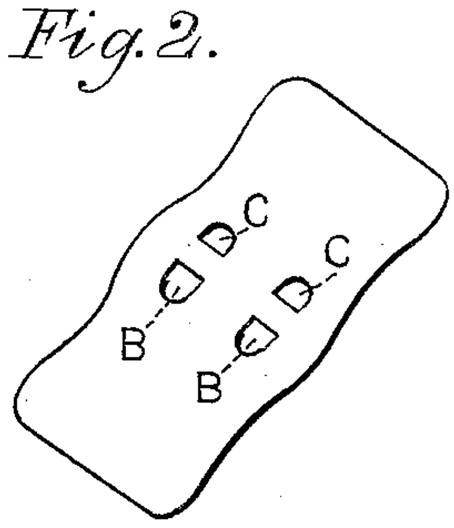


Fig. 3.

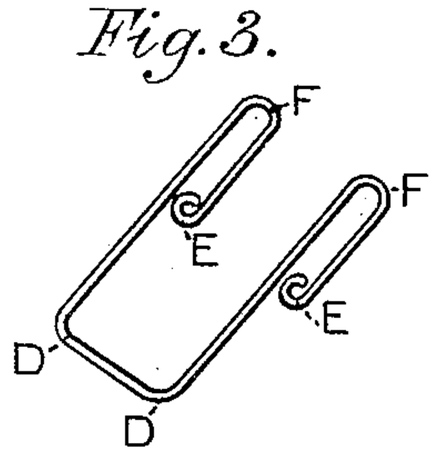


Fig. 4.

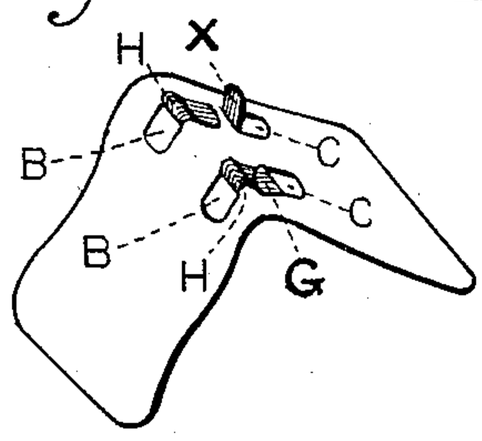


Fig. 5.

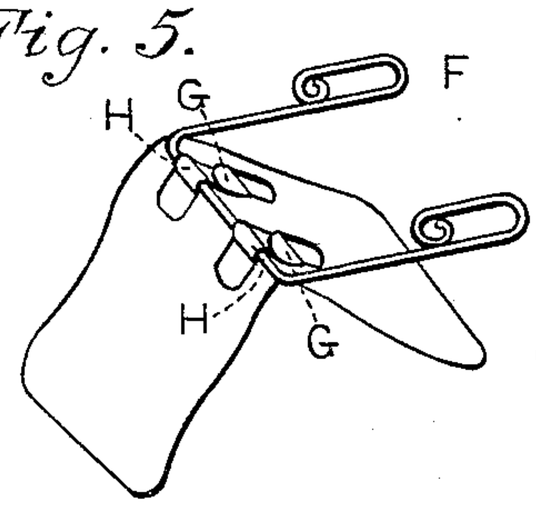


Fig. 6.

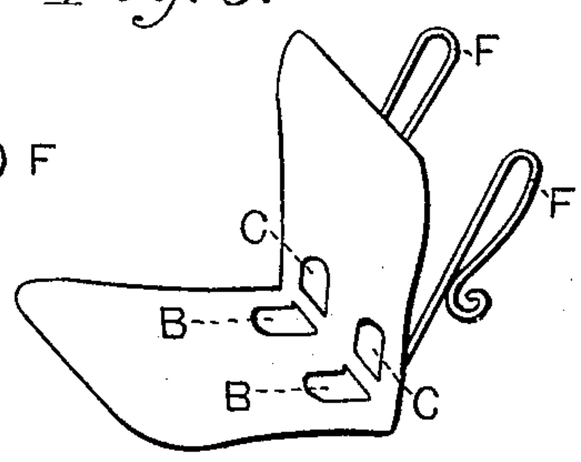


Fig. 7

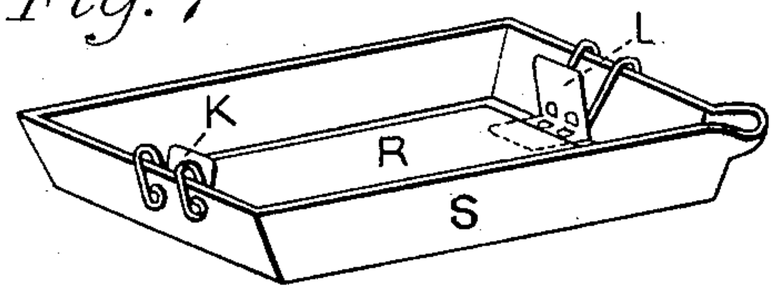
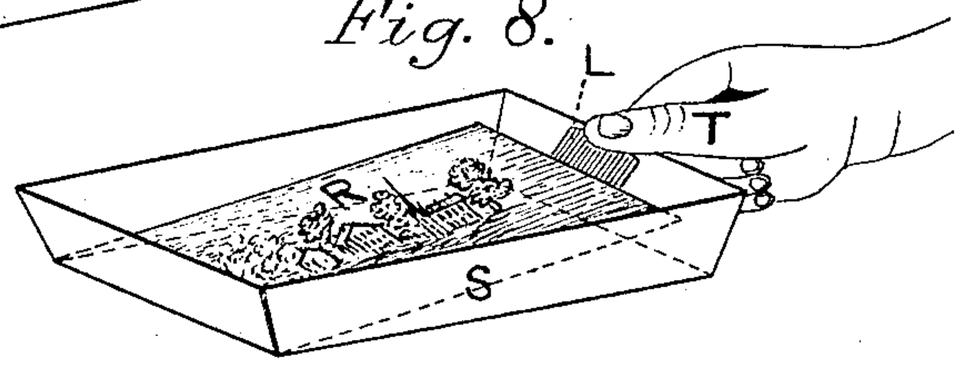


Fig. 8.



WITNESSES:
Howard B. Senior
Alice E. Bigwood

Summerford Crawford Smith INVENTOR

BY

R. Stuart Smith ATTORNEY.

UNITED STATES PATENT OFFICE.

SAMUEL CRAWFORD SMITH, OF PHILADELPHIA, PENNSYLVANIA.

PHOTOGRAPHIC-PLATE LIFTER.

SPECIFICATION forming part of Letters Patent No. 572,663, dated December 8, 1896.

Application filed November 30, 1895. Serial No. 570,636. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL CRAWFORD SMITH, a citizen of the United States, residing in Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Photo-Plate Lifter, of which the following is a specification.

My invention relates to improvements in photographic-plate lifters operating in connection with photographers' developing and fixing solution trays.

The object of my improvement is to lift in the simplest manner the plate from the bottom of the photographic tray without staining the hands and without injury to the film, as well as to create a constant ebb and flow of the chemical over the plate in course of development. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 shows the metal plate before bending. Fig. 2 shows the same with the openings left after cutting out flaps to bind the spring. Fig. 3 shows the U-shaped wire attachment. Fig. 4 shows the metal plate bent and the method of attaching the U-shaped wire by flaps cut in the metal plate. Figs. 5 and 6 show the plate-lifter complete. Fig. 7 shows a photographic tray with plate-lifters in place. Fig. 8 shows a photographic tray with a plate being raised by the plate-lifter, operated by the thumb.

The device consists of an oblong metal plate A, cut in the shape indicated by Fig. 1, with apertures B B and C C stamped before the metal plate is bent, as shown by Fig. 2. This plate is bent to an angle of ninety degrees or less and attached at that angle to a U-shaped wire at D D, Fig. 3, the wire being curved at F F with spring-pressure at E E. The method of attaching this U-shaped wire to the bent metal plate is shown by Fig. 4. The flaps H H, Fig. 4, are turned from the apertures B B to receive the wire and are held at the ends by the flaps X and G, which are turned from the apertures C C. The wire is thus clasped to the metal plate, as in Figs. 5 and 6.

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

In a photographic-plate lifter, the combination with an oblong piece of sheet metal bent to an angle of ninety degrees or less, of the U-shaped wire attached at its base to the angle of the sheet-metal piece and having its arms bent to form spring-clasps for engaging the side of the photographic tray, substantially as described.

SAMUEL CRAWFORD SMITH.

Witnesses:
GEORGE W. CLEMENT,
R. STUART SMITH.