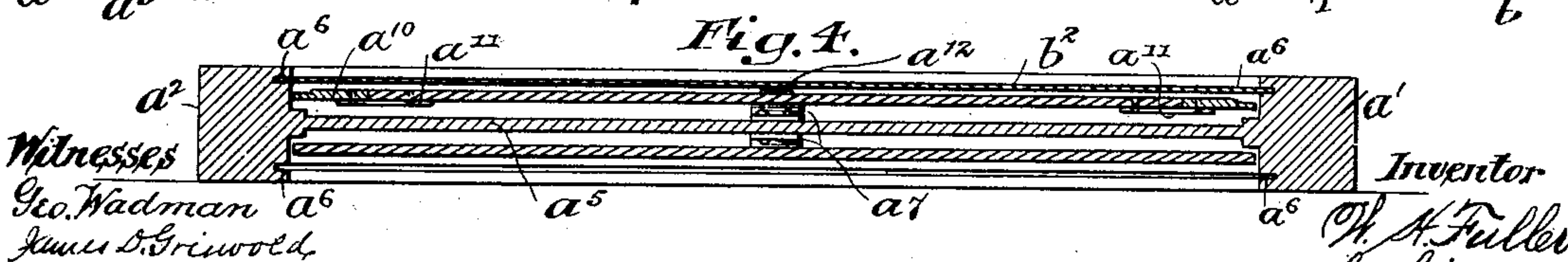
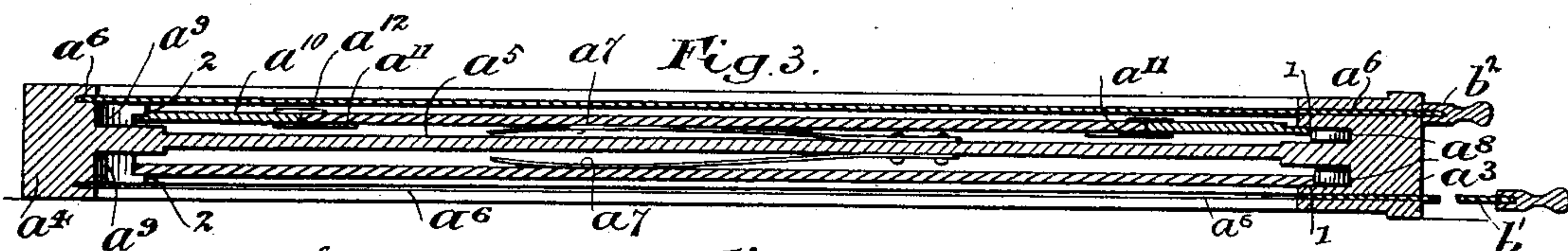
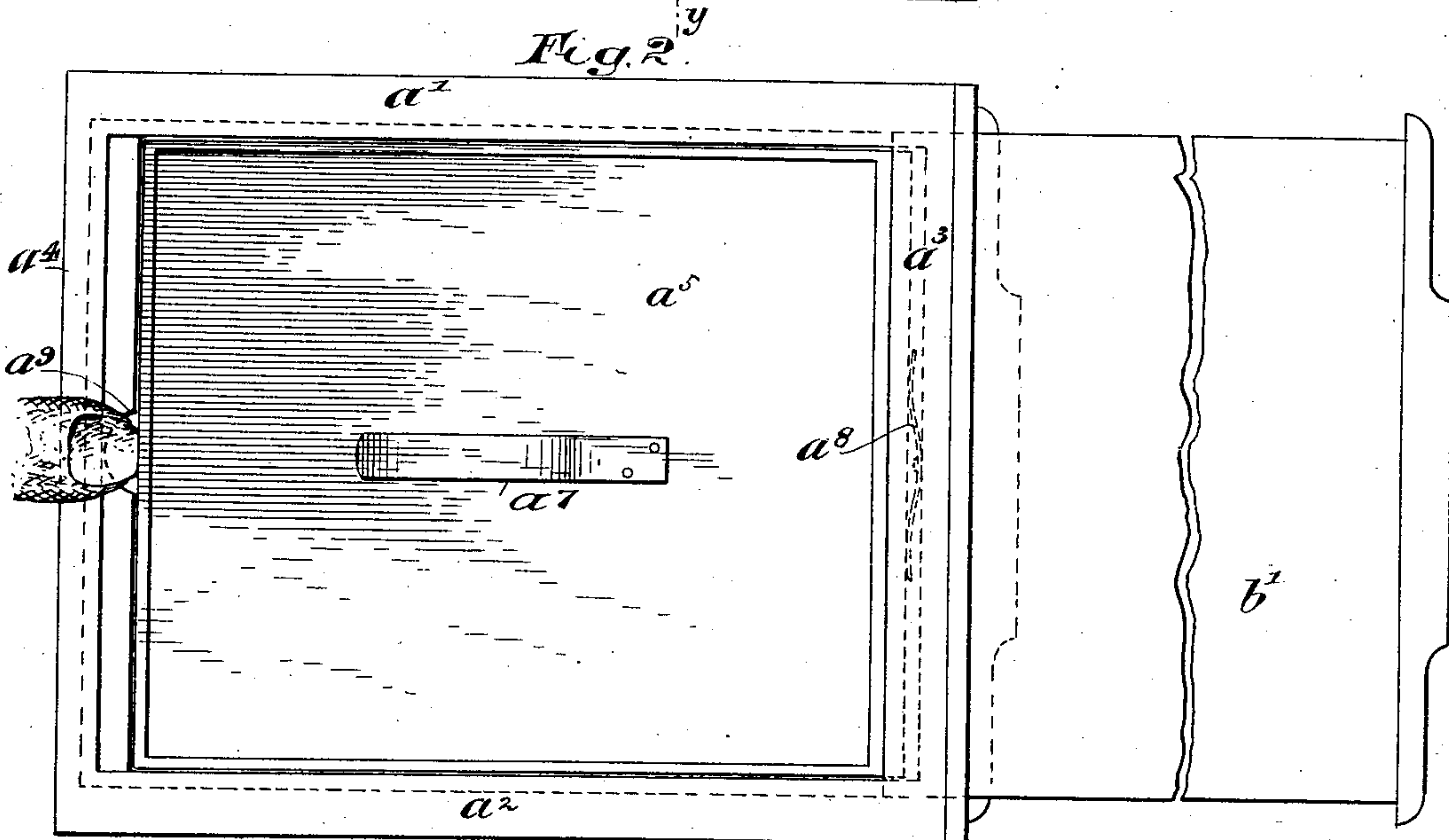
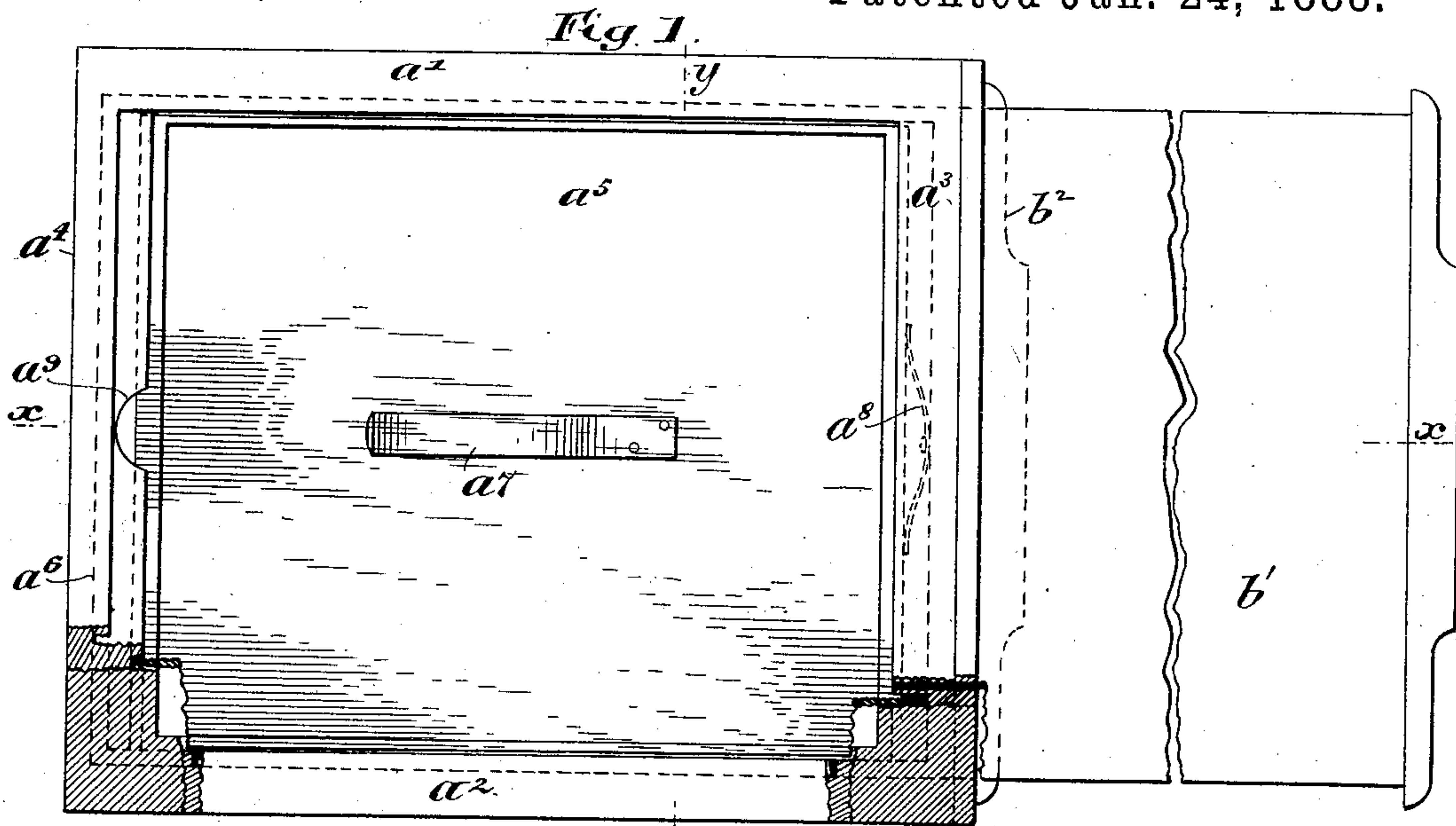


(No Model.)

W. H. FULLER.
PHOTOGRAPHIC PLATE HOLDER.

No. 376,983.

Patented Jan. 24, 1888.



Witnesses
Geo. Hadman
James D. Griewood.

Inventor
W. H. Fuller
by his attys
H. H. & B. B.

UNITED STATES PATENT OFFICE.

WILLARD H. FULLER, OF PASSAIC, NEW JERSEY, ASSIGNOR TO THE
SCOVILL MANUFACTURING COMPANY, OF NEW YORK, N. Y.

PHOTOGRAPHIC-PLATE HOLDER.

SPECIFICATION forming part of Letters Patent No. 376,983, dated January 24, 1888.

Application filed July 9, 1887. Serial No. 243,815. (No model.)

To all whom it may concern:

Be it known that I, WILLARD H. FULLER, of Passaic, in the county of Passaic and State of New Jersey, have invented a certain new and useful Improvement in Photographic-Plate Holders, of which the following is a specification.

The object of the improvement is to provide a simple and inexpensive plate-holder from which photographic plates may be removed without injuriously handling them.

I will describe in detail a photographic-plate holder embodying my improvement, and then point out the novel features in claims.

In the accompanying drawings, Figure 1 is a sectional side view of a plate-holder embodying my improvement. Fig. 2 is a similar view showing certain parts in a different position. Fig. 3 is a longitudinal section taken as indicated by the dotted line *x x*, Fig. 1. Fig. 4 is a transverse section taken at the plane of the dotted line *y y*, Fig. 1.

Similar letters of reference designate corresponding parts in all the figures.

This plate-holder is adapted to hold two photographic plates. My invention, however, may be applied to a plate-holder adapted to hold but a single plate. This plate-holder has a frame consisting of two side pieces, *a' a'*, arranged opposite to and parallel with each other, and two end pieces, *a³ a⁴*, arranged intermediately of them and at or about right angles. A diaphragm, *a⁵*, extends across the frame between the side pieces and the end pieces, so as to divide the space between the side pieces and end pieces into two adjacent compartments.

At each side of the diaphragm *a⁵* the side pieces and end pieces of the frame of the plate-holder are provided in their opposite faces with grooves *a⁶*. These grooves are adapted to receive shutters *b' b'* of ordinary construction. The hand-pieces of the shutters extend beyond the end piece, *a³*, and hence may at all times be grasped by the hand. The diaphragm *a⁵* is provided on each side with a spring, *a⁷*, against which a photographic plate is intended to bear when inserted in the plate-holder. The spring upon which each plate-holder will rest serves to force the plate outwardly

whenever the plate is free to move in that direction. The opposite faces of the end pieces, *a³ a⁴*, are provided with flanges 1 2 near their outer sides.

Beneath or behind each of the flanges 1 of the end pieces, *a³*, a spring, *a⁸*, is arranged. As shown, such spring consists of a bow-shaped strip of metal, and is fastened about midway between the ends, by a screw or nail, to the end piece, *a³*. The end pieces, *a³ a⁴*, are closed beneath the flanges 1 2 and at the rear of the recesses formed thereby. The side pieces, *a' a'*, have no flanges. When a photographic plate, or a kit or frame fastened to a photographic plate, is inserted within one of the compartments of the plate-holder which I have described, one end will be forced against the ends of the spring *a⁸* of that compartment and forced against the resistance offered by the spring into the space which is beneath or behind the flange 1 of the end piece, *a³*, belonging to that compartment. When the end has been inserted beneath or behind said flange 1, the latter will prevent the plate from being forced outwardly by the spring *a⁷* of the compartment into which the plate or kit has been partly introduced. The plate or kit can be moved so far into the recess behind the said flange 1 that the other end of the plate or kit may be moved toward the diaphragm *a⁵* far enough to pass the flange 2 of the end piece *a⁴*. When it shall have passed the said flange 2 and been relieved from the force of the hand, the spring *a⁸* will move it so that it will extend under the flange 2. Then the plate or kit will be held at the two ends by the flanges 1 2.

The flange 2 is provided about midway between the side pieces, *a' a'*, with a notch, *a⁹*, of suitable size for the insertion of a finger or thumb. The plate or kit may thus be reached by the finger or thumb while held in place by the flange 2. If the thumb or finger be inserted and pressed against the plate or kit, the latter may be moved farther into the recess which is beneath or behind the opposite flange 1 of the end piece, *a³*, and thus the end which was previously secured by the flange 2 may be released from said flange, whereupon the spring *a⁷* will throw the plate or kit out-

wardly into a position which will permit of its being easily lifted out from the plate-holder.

What I have said applies equally well to each compartment of the plate-holder.

I have shown in one of the compartments of the plate-holder a photographic plate only, and in the other compartment I have shown a photographic plate arranged in a kit. This kit a^{10} consists of a thin frame having corner pieces, a^{11} , across its central opening at one side of the frame and swinging buttons a^{12} fastened to the other side of the frame and adapted to be swung over a plate placed within the central opening.

It will be seen that the kit is of sufficient thickness only that when the plate has been placed within the central opening and between the said corner pieces and buttons, the surfaces of the plate will be approximately flush with the surfaces of the kit upon both sides.

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

1. In a photographic-plate holder, the combination of a frame composed of side and end

pieces rigidly secured together, the end pieces being provided with flanges adapted to secure a photographic plate, one of said end pieces having a notch in its flange, the other of said end pieces having a spring arranged in a recess beneath or behind the flange, and both said end pieces being closed beneath said flanges and at the rear of the recesses formed thereby, substantially as specified.

2. The combination, with a photographic-plate holder, of a kit consisting of a thin frame having a central opening, corner pieces extending across the central opening upon one side of the kit, and buttons at the other side of the kit adapted to be adjusted over the opening, said kit being of such thickness only that when a photographic plate is arranged in said opening and between said corner pieces and buttons the surface of the plate will be approximately flush with the surfaces of the kit upon both sides, substantially as specified.

WILLARD H. FULLER.

Witnesses:

CHAS. T. LUNT,
W. S. ZABRISKIE.