

(No Model.)

2 Sheets—Sheet 1.

G. H. CARLISLE.
PHOTOGRAPHIC PLATE HOLDER.

No. 406,085.

Patented July 2, 1889.

Fig. 1.

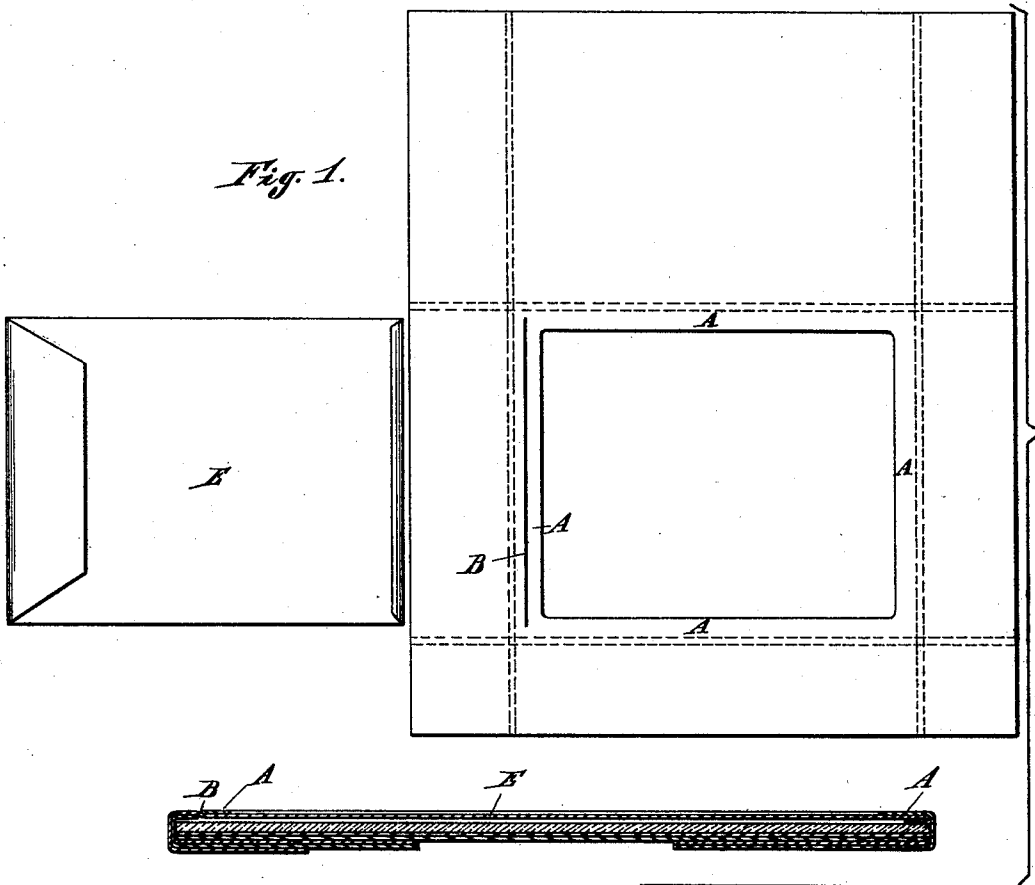
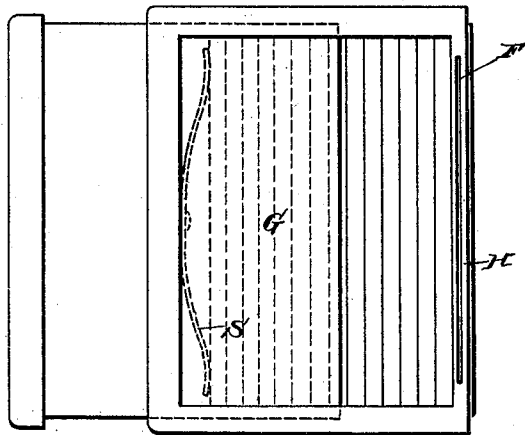


Fig. 3.

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George H. Carlisle
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his attorneys

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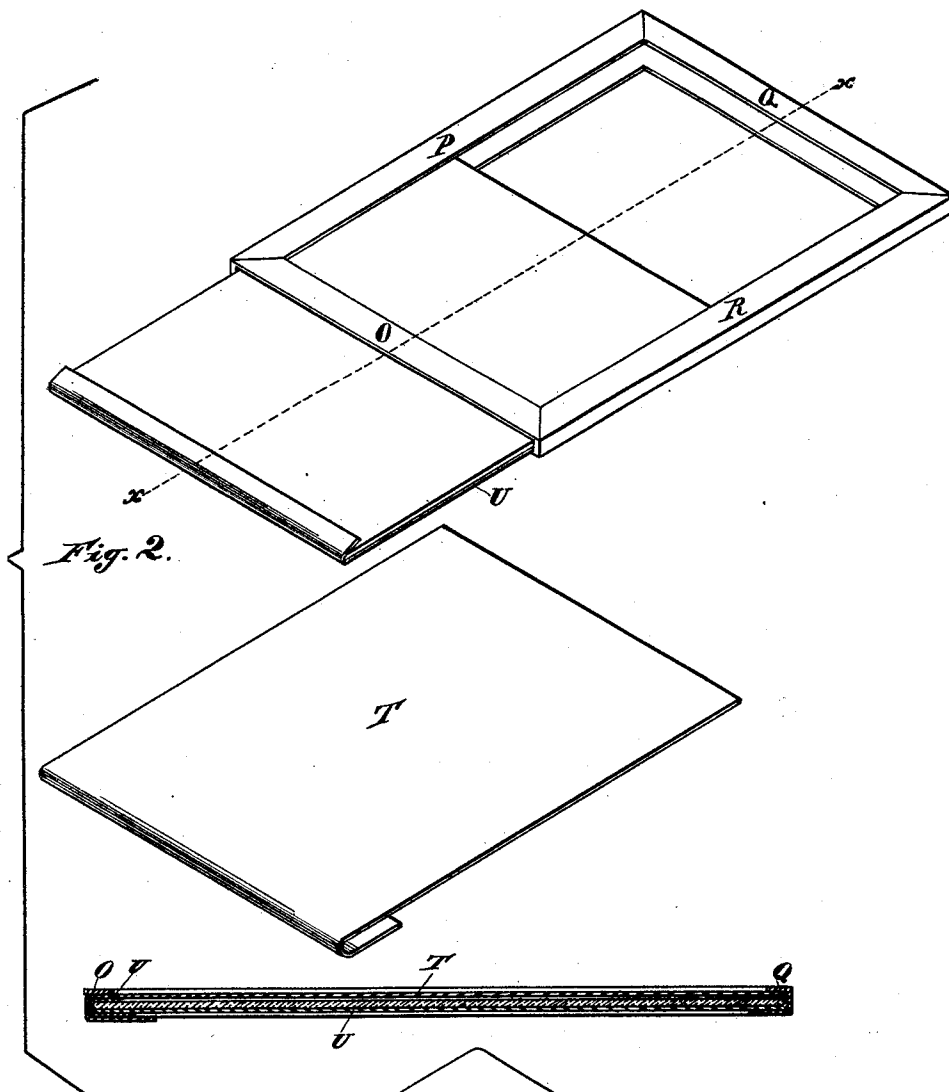


Fig. 2.

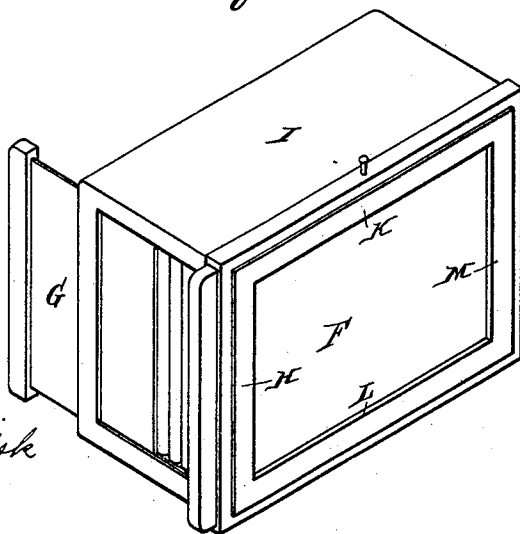


Fig. 1.

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Chas. H. Disk

Inventor

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UNITED STATES PATENT OFFICE.

GEORGE H. CARLISLE, OF DETROIT, MICHIGAN.

PHOTOGRAPHIC-PLATE HOLDER.

SPECIFICATION forming part of Letters Patent No. 406,085, dated July 2, 1889.

Application filed September 8, 1888. Serial No. 284,957. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. CARLISLE, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Photographic-Plate Holders, of which the following is a specification.

The object of my invention is the production of a photographic-plate envelope in which the ordinary dry plate used by photographers may be conveniently placed and used without being removed therefrom, and in which it may be kept indefinitely without handling from the time it is first prepared until after exposure it is finally removed from the envelope in the developing-room. To attain this result I make use of the envelope and the case for containing such envelope, described as follows:

Figure 1 shows a form of my envelope made entirely of thin flexible material impervious to actinic rays. Fig. 2 shows a modified form made of stiffer material. Fig. 3 shows in elevation the case which I employ to hold a number of the envelopes shown in Fig. 1 or Fig. 2. Fig. 4 shows the same thing in another position.

A sheet of material impervious to actinic rays is folded in the form of an envelope large enough to entirely inclose the dry plate to be used. From the front of the envelope thus formed a portion nearly as large as the dry plate is cut away, leaving, however, remaining of the front the top, bottom, and end pieces A A A A. The portions of the front thus left retain the plate in the envelope as in a frame, but permit the greater part of the surface to be uncovered, as hereinafter described.

Through one of the end pieces A is cut a slit B, extending from edge to edge of the envelope, and through this slit, in front of the plate, is inserted the slide-covering E. This is a strip of material impervious to actinic rays, and is of a size sufficient to completely fill the envelope from side to side and in length to extend slightly beyond the slitted end of the envelope when in position, extending through the slit into the envelope and across the entire exposed part of the inclosed plate.

The case shown in Fig. 3 is a box having two openings—one in front, closed by the slide

F, and the other at the side, closed by the slide G. At the corner where the two slides intersect a post H forms the support between the top I and the bottom I of the case, and also forms part of the frame-work K L M, in which are formed the ways arranged to guide and hold the slide F. The frame-work H K L M forms an interior flange that prevents the envelopes and their contained plates from being forced forward out of the case, while it permits exposure to the portion of the plate lying between the inner edges of the frame-work, and at the same time presses down firmly the bottom and end pieces A A A A upon the plate contained in the envelope when a number of these envelopes are placed in the case and pressed forward against the flange by the spring S in the back of the case.

A modified form of my invention is shown in Fig. 2, in which the frame-work O P Q R, made of some stiff material that will hold its position when bent, takes the place of the envelope first described, and this form has a similar opening both in front of and behind the plate. The slit for the introduction of the covering-piece T is at the extreme end, and I make use of a back covering U similar to the front covering, except that its end is folded around the end of the plate and returned in front of it behind the front covering-piece. Both the front and back covering in this form of my device are made of flexible material impervious to actinic rays.

In using these envelopes in the case described I place enough of them in the case, so that by means of the spring acting on the rearmost one the whole mass of them will be forced forward, the forward one will be pressed with considerable force against the flange H K L M, and each one of the series will be pressed with considerable force against the one next in front of it. The slide G is then placed in position to exclude all light through the opening which it covers. The slide F is placed in position to exclude all light from the opening which it covers, and the case, with the contained plate, is prepared for handling at any time.

To operate, the case, with the contained plates, is placed in the camera, the slide G drawn back a short distance, and the covering-piece E withdrawn from in front of the

first plate, the slide G returned, the slide F drawn out, and exposure made. After sufficient exposure the slide F is returned, the slide G drawn out, the rearmost envelope, 5 with its contained plate and covered in front with its slide-covering, is drawn out from the rear and placed in front of the envelope bearing the plate which has been exposed, and is in its turn operated upon in the same way 10 that the first plate was operated upon. When all of the contained plates have been used, a stiff slide-covering of metal or card-board may be inserted through the slit of the forward envelope and the whole mass of en- 15 velopes, with their contained plates, withdrawn from the case and transported to the developing-room.

I do not now in this application claim the plate-holding case having the slide-opening in 20 front and the slide-opening at the side, but reserve my right to make an application for a patent on that hereafter.

Having thus described my invention, what I claim as novel, and desire to have secured to 25 me by Letters Patent, is—

1. An envelope for photographic dry plates made of material impervious to actinic rays, having one side cut away to form an opening 30 nearly as large as the plate, and having a slit near one end through the portion of the side

remaining of the cut-away side for the introduction of a covering-piece, and combined with said covering-piece, substantially as and for the purposes described.

2. The combination of an envelope made of 35 material impervious to actinic rays, having one side cut away to form an opening through which to make exposure of the inclosed plate, a covering-piece arranged to cover said opening, and a case to hold one or more of said 40 combined envelopes and covering-pieces, the said case having a slide-covered opening in front and a slide-covered opening at the side for the insertion of the combined envelope and covering-piece.

3. The combination of an envelope made of 45 material impervious to actinic rays, having one side cut away to form an opening through which to make exposure of the inclosed plate, a covering-piece arranged to cover said opening, and a case to hold one or more of said 50 combined envelopes and covering-pieces, the said case having a slide-covered opening in front and an opening at the side, substantially as and for the purpose described.

GEORGE H. CARLISLE.

Witnesses:

HARRISON B. WRIGHT,
ANNA E. WHITE.