

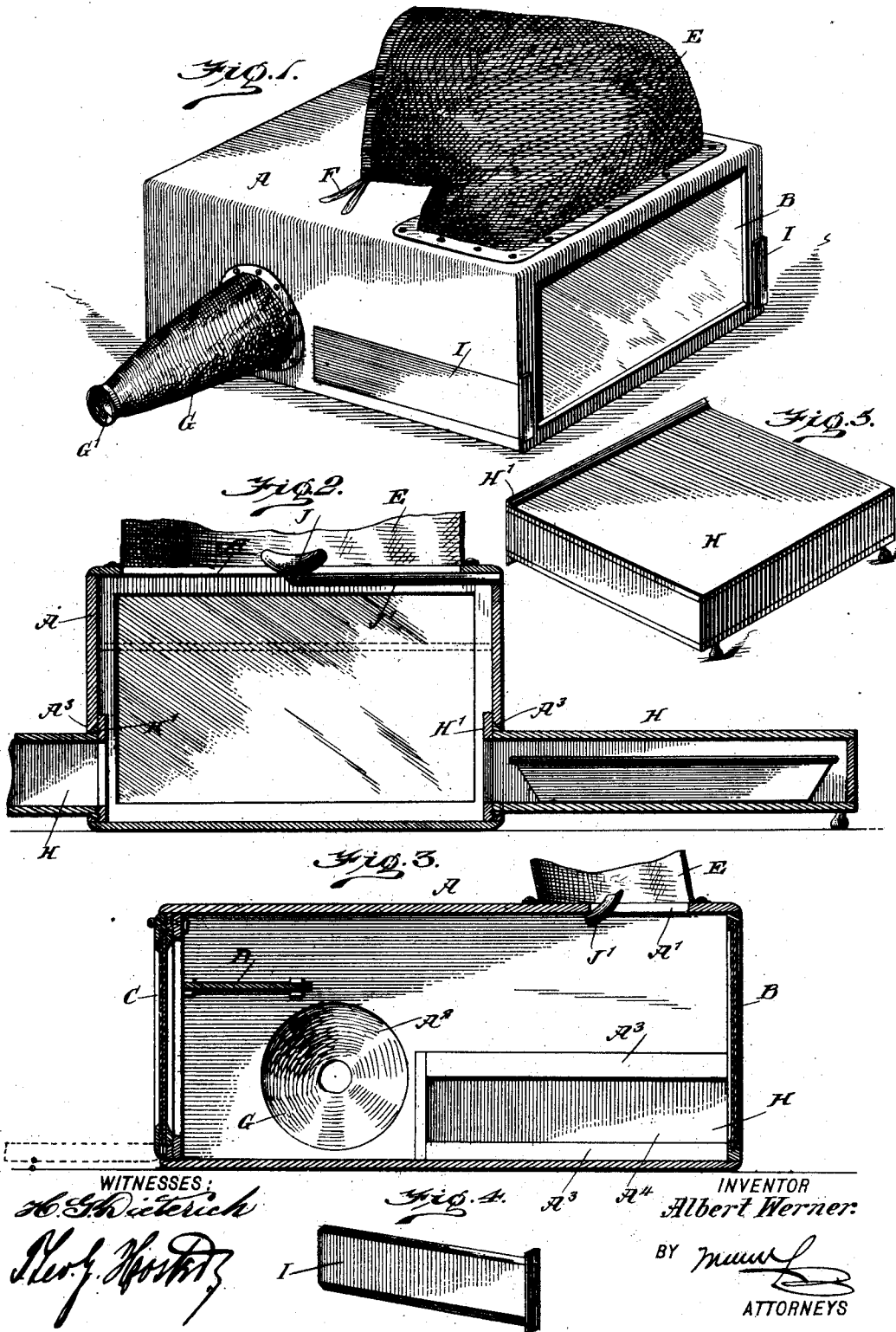
No. 666,988.

Patented Jan. 29, 1901.

A. WERNER.
PORTABLE PHOTOGRAPHIC DARK ROOM.

(Application filed Apr. 23, 1900.)

(No Model.)



UNITED STATES PATENT OFFICE.

ALBERT WERNER, OF ARENA, NEW YORK.

PORTABLE PHOTOGRAPHIC DARK ROOM.

SPECIFICATION forming part of Letters Patent No. 666,988, dated January 29, 1901.

Application filed April 23, 1900. Serial No. 13,926. (No model.)

To all whom it may concern:

Be it known that I, ALBERT WERNER, a citizen of the United States, and a resident of Arena, in the county of Delaware and State of New York, have invented a new and Improved Portable Dark Room, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved portable dark room which is simple and durable in construction, arranged to enable a photographer to conveniently fill plate-holders, to develop plates and films, to store trays and chemicals used in the developing process, and to permit of utilizing the dark room as a store-room or carrying-case for the camera or other articles.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the improvement. Fig. 2 is a transverse section of the same with the extension-boxes drawn out. Fig. 3 is a sectional side elevation of the same. Fig. 4 is a perspective view of one of the main box-slides, and Fig. 5 is a perspective view of one of the extension-boxes.

The improved portable dark room consists, essentially, of a main box A, having its front provided with a pane or panes B, of translucent material, preferably orange and red glass, and the rear end of the box is provided with a door C to give access to the interior of the main box. In the latter, at the rear top portion thereof close to the door C, are arranged shelves D for supporting plate-holders.

In the top of the box A and near the forward end thereof is arranged an opening A', to which leads a hood E, of flexible material, adapted to be passed over the operator's head, a draw-string F being in the end of the hood for securely closing the hood around the operator's neck and preventing rays of light from passing into the dark room at this point.

In the sides of the box A and near the rear

end thereof are arranged oppositely-disposed openings A², to which lead the inner ends of sleeves G, of flexible material, secured to the sides of the main box, elastics or draw-strings G' being at the outer ends of the sleeves for firmly drawing the sleeves around the operator's arms and preventing rays of light from passing to the interior of the box by way of the sleeves.

For developing large plates—say from eight by ten up—use is made of auxiliary extension-boxes H, open at one side only and formed at this side with dovetails H', adapted to engage with and slide in dovetail grooves A³, formed in the sides of the main box above and below side openings A⁴, normally closed by slides I, engaging the grooves A³, as indicated in Fig. 1.

In order to enable the operator to breathe freely and without danger of inhaling obnoxious gas, an air-supply mouthpiece J is arranged at the opening A' and connected by a pipe J' with the outside at one side of the main box. (See Fig. 2.)

In using the device for filling plate-holders, for instance, the box containing the plates and the holders is placed in position within the box A through the door C and then the latter is closed, and the operator now places the hood E over his head and draws the strings F tight and then engages with his arms the sleeves G, and as the sleeves are of flexible material it is evident that said sleeves can be readily pushed with the arms inside of the box or partly in to allow a perfectly-free movement of the arms within the box to enable the operator to open the plate-box and the holder and fill the same with plates in the usual manner.

For developing small plates the auxiliary boxes are not needed and the necessary trays are placed in the main box and the plate-holder containing the exposed plates is placed on the shelf D, and then the operator engages the hood E, as described, as well as the sleeves G, to develop the plates in the usual manner, it being understood that the shelf C in the rear top portion of the box allows of conveniently storing articles not in use at the time, so as to be completely out of the way when manipulating the tray during the developing process. For developing large plates the slides are removed and the auxiliary box H

is placed in position, with a tray containing water placed in one of the auxiliary boxes, a tray with hypo in the other auxiliary box, a tray containing the developer placed in the forward end of the main box, and the plate-holder on the shelf D. The operator now engages the hood E and sleeves G, as previously described, and then removes the plate from the holder and develops it in the tray contained in the box. When the plate is developed, the tray containing it is pushed to the rear of the box and the tray containing the water is moved out of its auxiliary box into the forward end of the main box, and then the developed plate is washed in the water, and then this water-tray is pushed back into its auxiliary box. The operator now draws the hypo-tray from the other auxiliary box and places the washed plate into the hypo. The operator can then disengage from the sleeves and hood, as there is now no more danger of injury to the plate by rays of light. The auxiliary box containing the hypo-tray and plate can be removed from the box A to allow of removing the plate when sufficiently hypoed.

When the dark room is not in use for its ordinary legitimate purpose described, it may be used as a store-room or carrying-case for the camera or other articles.

The shelf D is used for plate-holders only, as it is absolutely necessary that the plate-holders be as far distant from the trays when developing as possible, as it is a very difficult matter to prevent the holders from getting wet while developing, and if a plate-holder gets wet the wood parts swell, so that the holder cannot be used again until it is thoroughly dried out. The rear bottom portion of the box is used for chemicals, trays, and the like.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A portable dark room, comprising a

main box having a flexible hood secured around the opening in the top of the box and sleeves of flexible material secured around openings in opposite sides of the box, said box being provided with openings in its sides normally closed by slides, and auxiliary boxes open only at one side, and adapted to be inserted in said openings when the slides are removed so as to extend outwardly from the main box, substantially as described.

2. A portable dark room, comprising a main box having a pane in its front and provided with a flexible hood secured around an opening in its top and sleeves of flexible material secured around openings in its sides, said box being also provided with a shelf and with openings in its sides normally closed by slides, and auxiliary boxes open only at one side, and adapted to be secured in said openings when the slides are removed so as to extend outwardly from the main box, substantially as described.

3. In a portable dark room, the combination with a main box having openings in its sides and provided with guideways above and below the openings, of auxiliary boxes open only at one side and provided with flanges at said side, adapted to engage the guides of the main box, substantially as described.

4. In a portable dark room, the combination with a box having a pane in its front and provided with a flexible hood secured around an opening in the top and with sleeves around openings in opposite sides, of a mouthpiece arranged at the opening around which the hood is secured, and a pipe secured to the mouthpiece and leading to the outside of the box, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALBERT WERNER.

Witnesses:

MARTHA STOUTENBURGH,
EMMA DICKSON.