

Aug. 28, 1923.

1,466,038

J. H. BRUBAKER
DEVICE EMPLOYED IN FINISHING AND RETOUCHING PHOTOGRAPHIC
NEGATIVES AND THE LIKE
Filed Feb. 13, 1922

2 Sheets-Sheet 1

Fig. 1.

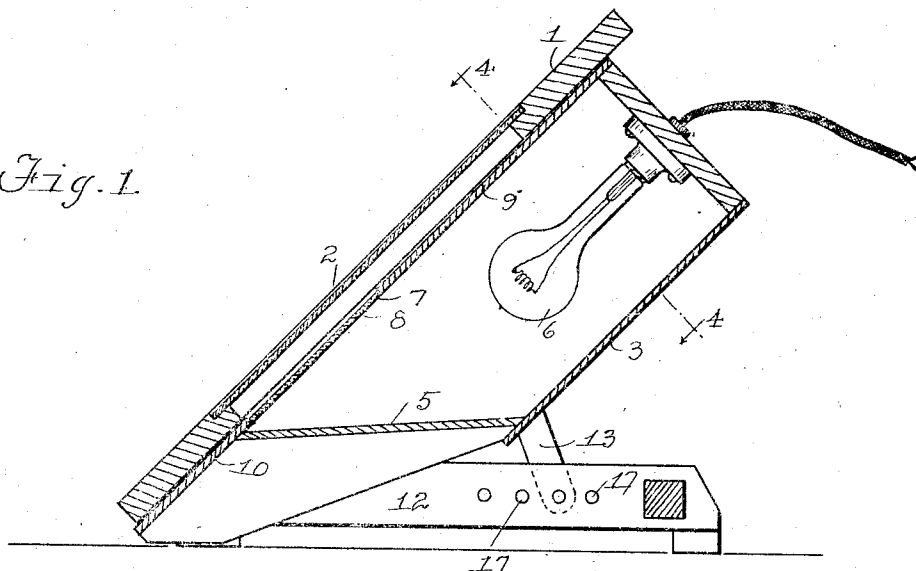
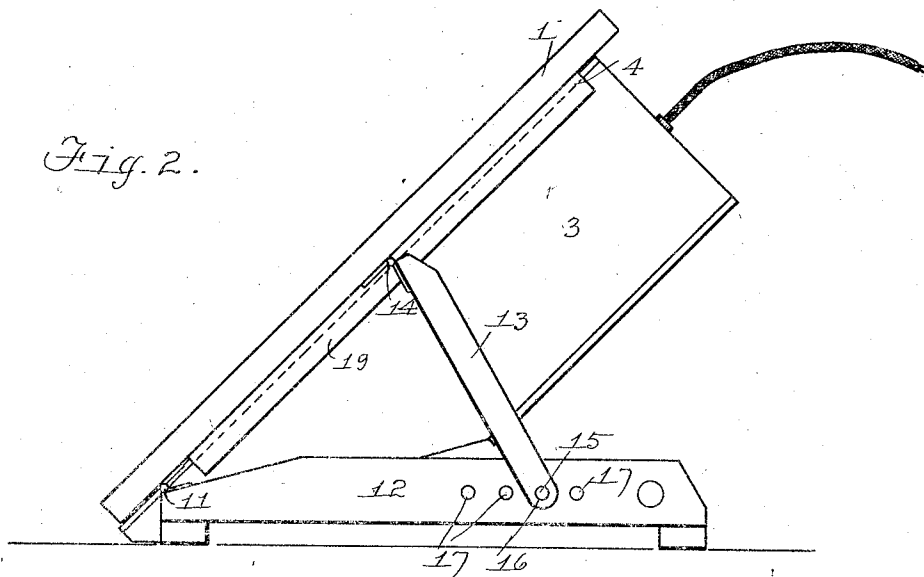


Fig. 2.



Witness:

Geo. L. Chapin

Inventor:

John H. Brubaker
by *Cyrus W. Rice*
Attorney.

Aug. 28, 1923.

1,466,038

J. H. BRUBAKER
 DEVICE EMPLOYED IN FINISHING AND RETOUCHING PHOTOGRAPHIC
 NEGATIVES AND THE LIKE
 Filed Feb. 13, 1922 2 Sheets-Sheet 2

Fig. 4.

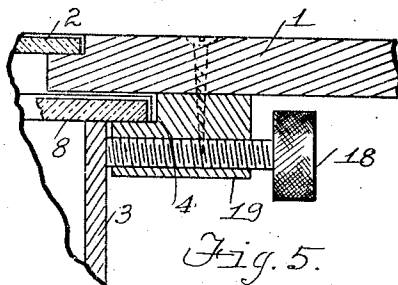
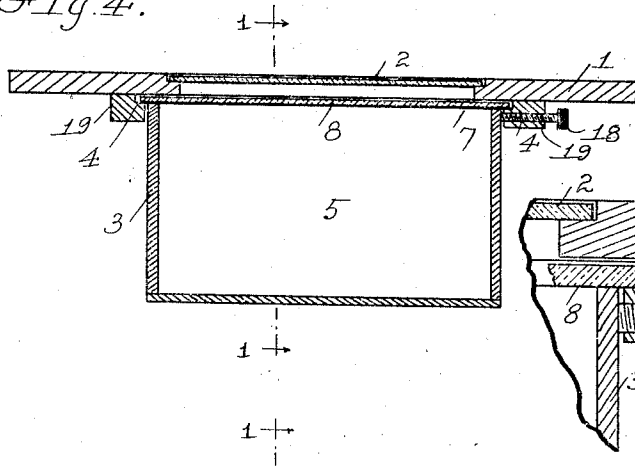


Fig. 5.

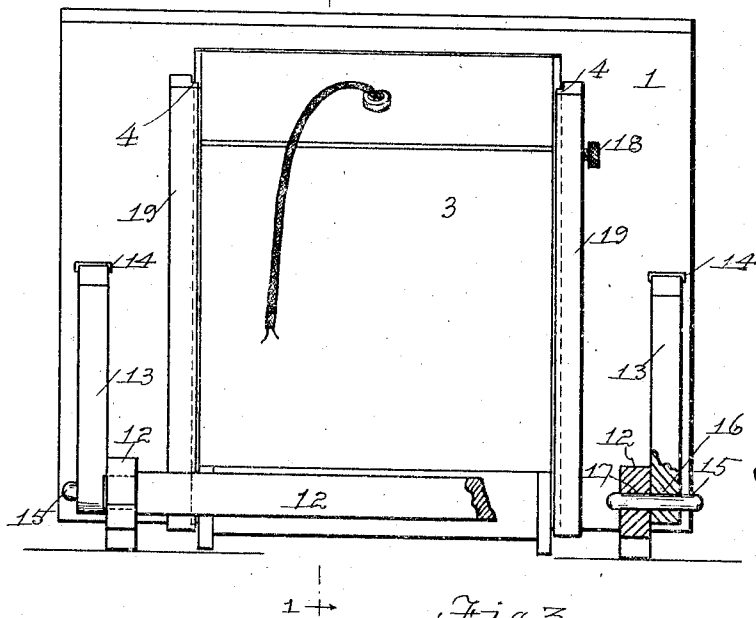
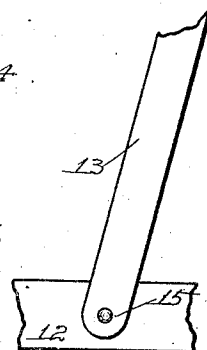


Fig. 3.

Fig. 6.



Witness:

Geo. L. Chapin

Inventor:

John H. Brubaker
 by *Cyrus W. Rice*
 Attorney.

UNITED STATES PATENT OFFICE.

JOHN H. BRUBAKER, OF GRAND RAPIDS, MICHIGAN.

DEVICE EMPLOYED IN FINISHING AND RETOUCHING PHOTOGRAPHIC NEGATIVES AND THE LIKE.

Application filed February 13, 1922. Serial No. 536,044.

To all whom it may concern:

Be it known that I, JOHN H. BRUBAKER, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented new and useful Improvements in Devices Employed in Finishing and Retouching Photographic Negatives and the like, of which the following is a specification.

The present invention relates to devices employed in finishing or retouching photographic negatives and the like; and its object is to provide a structure or device of that character which may be readily operated and adjusted to varying conditions in practice, and whereby the light may be most advantageously thrown upon and directed to the work.

This object is attained by, and the invention finds preferable embodiment in, the structure or device hereinafter particularly described in the body of this specification and illustrated by the accompanying drawings, in which:—

Figure 1 is a sectional view of a device employed in finishing or retouching photographic negatives and the like, taken on a vertical plane corresponding to line 1—1 of Figures 3 and 4;

Figure 2 is a side view of the same;

Figure 3 is a rear view thereof;

Figure 4 is a transverse sectional view of the frame and slidable box of said device, taken on a plane corresponding to line 4—4 of Figure 1;

Figure 5 is an enlarged sectional view of portions of the same taken on the same plane; and

Figure 6 is a side view of a supporting arm for said frame.

In the embodiment of the invention chosen for illustration by the drawings and for detailed description in the body of this specification, my device has a frame 1 containing a translucent and preferably also transparent (i. e. "clear") pane 2 of glass, upon whose outer side the photographic negative or the like is laid while being finished or "retouched." A box 3 is mounted on the rear side of this frame slidably upwardly-downwardly in spaced slide bearings or guides 4. This box has a light-reflecting inner surface 5, preferably white (and preferably the entire inner surface of this box

is white) and inclined, as shown in Figure 1, relatively to the direction in which the box slides in its bearings. This box contains a lamp 6 and has an opening 7 toward the frame, containing a pane 8 which is translucent but preferably non-transparent being desirably a sheet of "ground" glass. These two panes 2 and 8 are preferably spaced apart parallelly as seen in Figures 1 and 4, for I have found that the light passing through a translucent but non-transparent pane, as of ground glass, and through a spaced away pane of clear or transparent glass is peculiarly effective in finishing or retouching photographic negatives and the like.

This pane 8 is held securely in position between the spaced strips 9, 10 of the box extending transversely to the direction of the box's sliding movement (which strips engage the upper and lower edges of said pane) and between the slide bearings 4, 4 which engage the side edges of said pane.

As shown in Figure 1, the light from the lamp 6 is reflected by the box's inclined inner surface 5 to and through the panes 8, 2 and through the work—the negative or the like—lying on the front or face of the pane 2; and it will be seen that, as the box is slid upwardly or downwardly the light may be made to shine directly through an upper or lower part of the pane 2 as may be desired, thus to illuminate particularly a higher or lower portion of the work.

To accommodate the frame 1 to the angle desired by the operator, it is hinged or swingably mounted at 11 on a suitable base 12. The supporting arms 13 hinged to the frame at 14 may be held in desired adjustment by passing pins 15 through their openings 16 and into any one of the openings 17 in the base. To secure the box in a desired position in its slide bearings, the binding screw 18, threaded in one of the ribs 19 in which are formed the slide bearings 4, and adapted to engage the side of the box, may be screwed down into such engaging or binding position.

It will be seen that the opaque strip 9 prevents the light from the lamp from shining directly on the pane 2 (or that portion of it on which the work is laid) and that all the light reaching said pane (or its said portion) is reflected from the inclined surface or re-

flector 5 and passes through the translucent but non-transparent pane 8 whereby the light is diffused.

The invention being intended to be pointed out in the claims, is not to be limited to or by details of construction of the particular embodiment thereof illustrated by the drawings or hereinbefore described.

I claim:

- 10 1. In a structure of the character and for the purpose described; a frame containing an outer transparent pane and carrying an inner translucent non-transparent pane spaced from said transparent pane.
- 15 2. In a structure of the character and for the purpose described; a frame containing a translucent pane; a box slidably mounted on the rear of the frame, and having a light-reflecting inner surface inclined relatively
- 20 to the direction of the box's sliding movement and an opening toward the frame; a lamp inside the box.
3. In a structure of the character and for the purpose described; a frame containing
- 25 a transparent pane; a box slidably mounted on the rear of the frame, and having a light-reflecting inner surface inclined relatively to the direction of the box's sliding movement and an opening toward the frame
- 30 containing a translucent non-transparent pane; a lamp inside the box.
4. In a structure of the character and for the purpose described; a frame containing a transparent pane, and having spaced
- 35 slide bearings on its rear side; a box slidable in said bearings and having a light-reflecting inner surface inclined relatively

to the direction of the box's sliding movement, and spaced strips adjacent the frame extending transversely to the direction of the box's movement, and a translucent non-transparent pane held between said strips and between said bearings; a lamp inside the box.

5. In a structure of the character and for the purpose described; a base; a frame, mounted on the base swingably in a vertical plane perpendicular to the face of the frame, and containing a transparent pane, and having spaced slide bearings extending upwardly-downwardly on its rear side; a box slidable in said bearings and having a light-reflecting inner surface inclined relatively to the direction of the box's sliding movement and an opening toward the frame containing a translucent non-transparent pane spaced from the frame's said pane; a lamp inside the box; means for holding the box in slid position; means for holding the frame in swung position.

6. In a structure of the character and for the purpose described; a frame carrying a translucent non-transparent pane; a lamp; an opaque body between the lamp and the pane to prevent light from the lamp shining directly on the pane; a reflector inclined at an angle in the plane which is perpendicular to the face of the pane adapted to reflect the light from the lamp on the pane.

In testimony whereof I have hereunto set my hand at Grand Rapids, Michigan, this 10th day of February, 1922.

JOHN H. BRUBAKER.