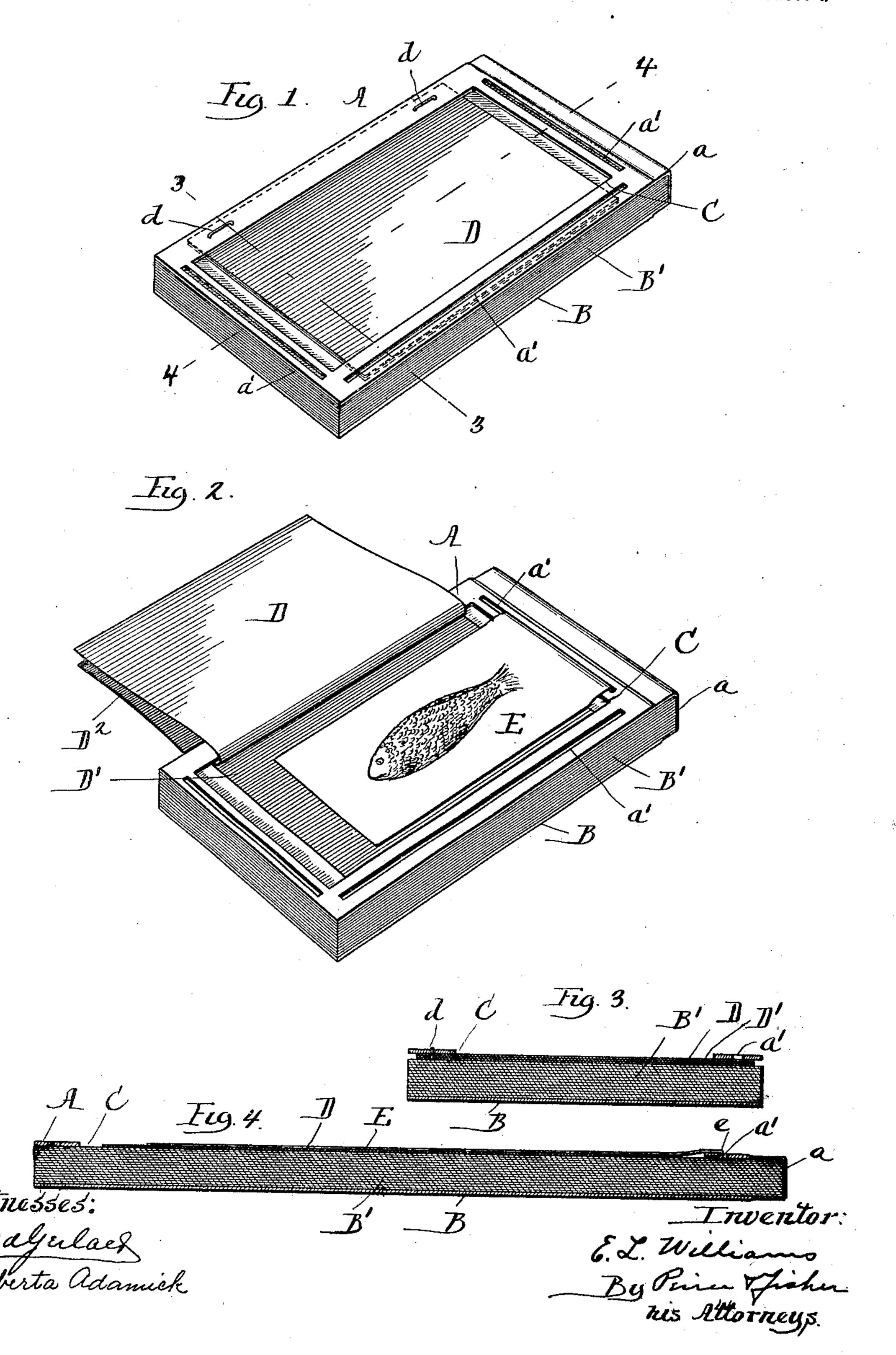
## E. L. WILLIAMS.

# MEANS FOR TRACING PICTURES, &c.

(Application filed Nov. 19, 1901.)

(No Model.)

2 Sheets-Sheet 1.



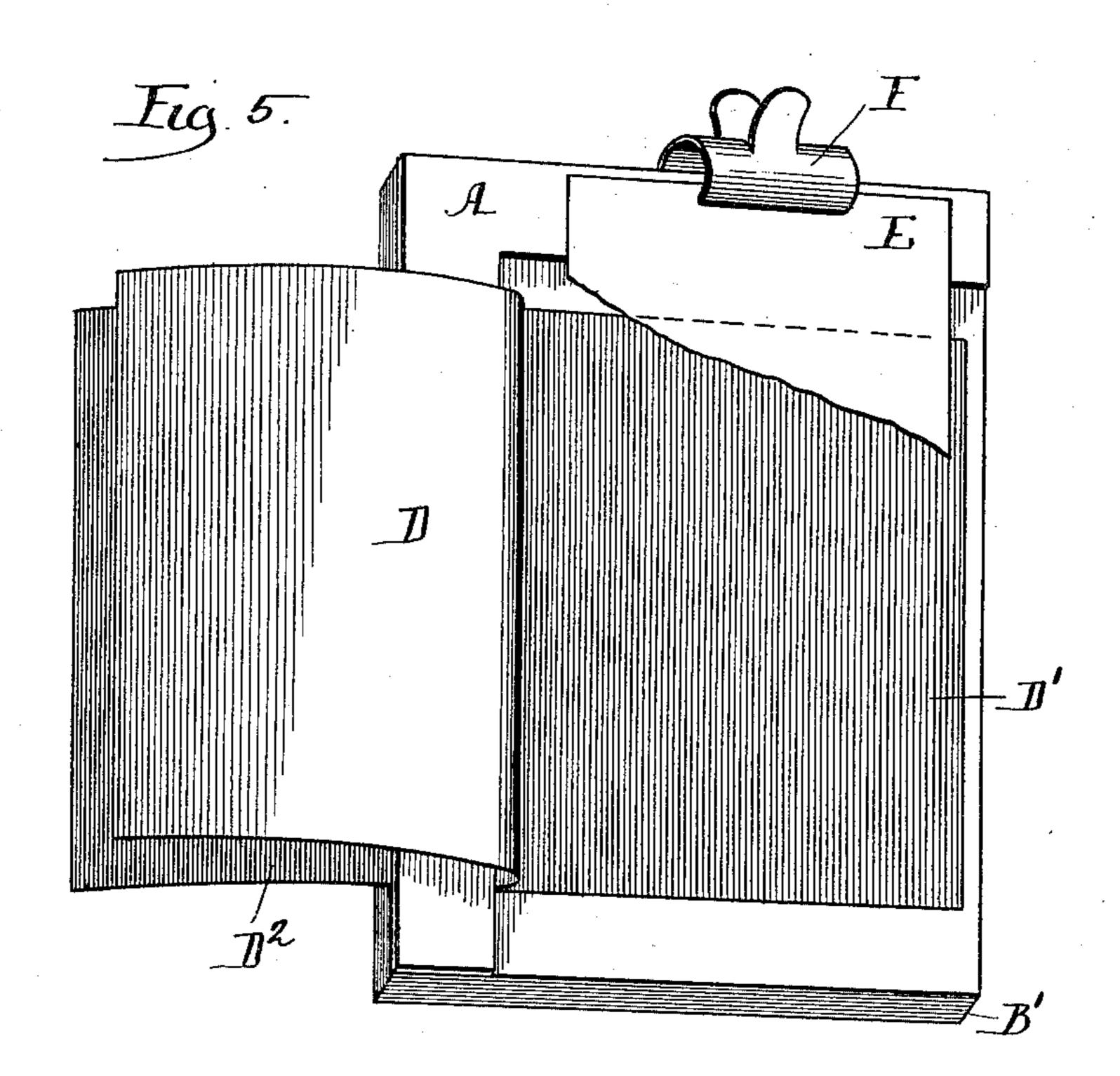
#### E. L. WILLIAMS.

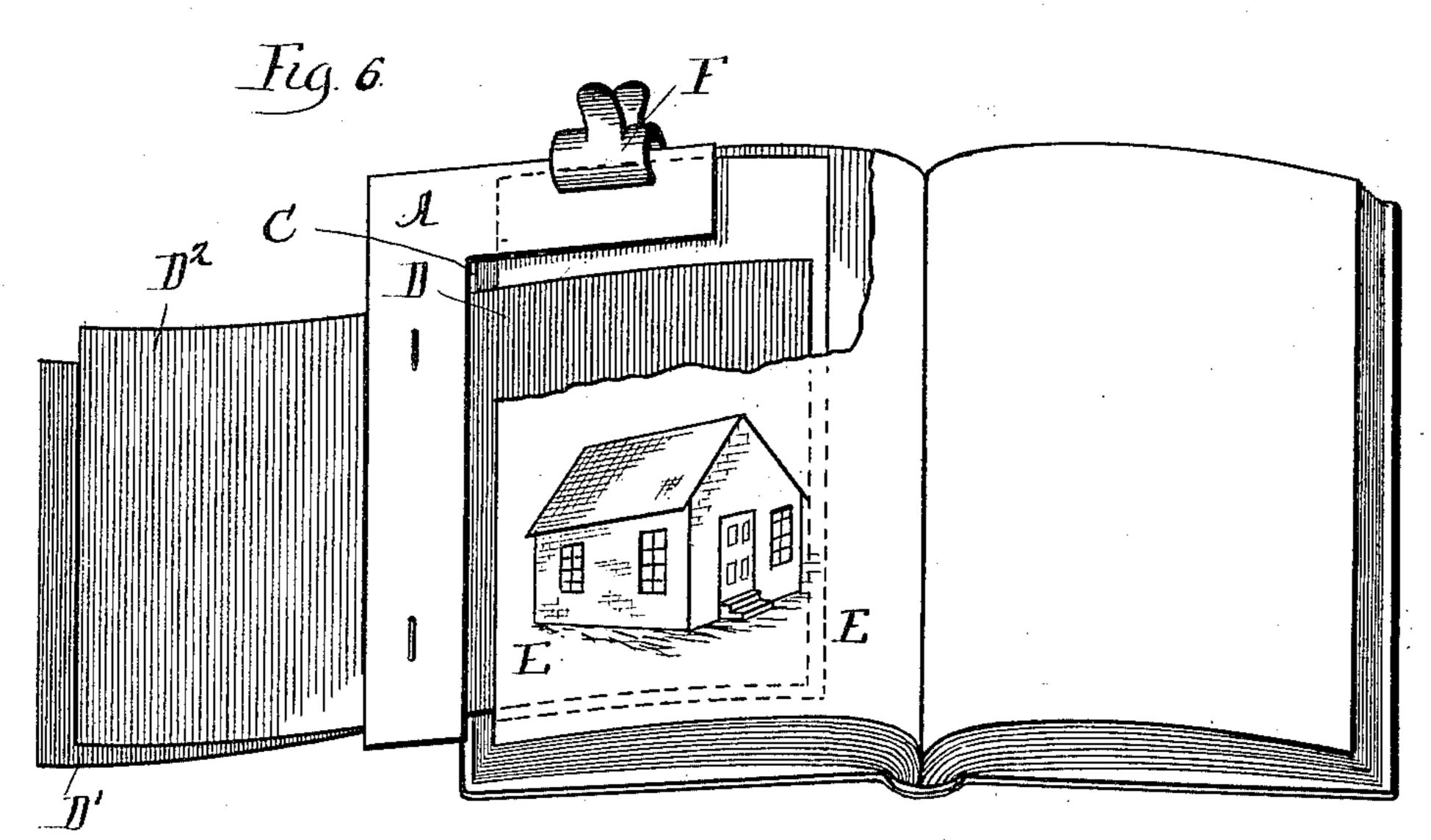
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(No Model.)

2 Sheets-Sheet 2.





Witnesses: Fredjerlaes Alberta Adamick

Inventor:

E. Z. Williams

By Pince Y Lisher

his Attorneys.

# UNITED STATES PATENT OFFICE.

EDGAR L. WILLIAMS, OF PEORIA, ILLINOIS.

## MEANS FOR TRACING PICTURES, &c.

SPECIFICATION forming part of Letters Patent No. 697,764, dated April 15, 1902.

Application filed November 19, 1901. Serial No. 82,842. (No model.)

To all whom it may concern:

Be it known that I, EDGAR L. WILLIAMS, a resident of the city and county of Peoria, State of Illinois, have invented certain new 5 and useful Improvements in Means for Tracing Pictures, Drawings, Inscriptions, or the Like, of which the following is a full, clear, and exact description.

This invention has for its object to provide 10 a simple and effective means whereby drawings, prints, inscriptions, or the like may be conveniently traced in one or more colors; and the invention consists in the features of improvement hereinafter described, illus-15 trated in the accompanying drawings, and particularly pointed out in the claims at the end of this specification.

Figure 1 is a perspective view embodying the invention. Fig. 2 is a perspective view 20 showing certain of the carbon-sheets turned to one side. Fig. 3 is a view in cross-section on line 3 3 of Fig. 1. Fig. 4 is a view in longitudinal section on line 4 4 of Fig. 1. Fig. 5 is a perspective view showing a modi-25 fied form of the invention. Fig. 6 is a perspective view showing the invention as applied in making tracings from a book.

In the accompanying drawings the invention is shown as applied in connection with 30 a pad of paper whereon the reproduction of the drawing, print, or the like is to be made; but I wish it distinctly understood that the invention is not limited to its use in this particular connection, since it may be employed

35 in a variety of other ways. The method most commonly adopted for making reproductions or tracings of drawings, prints, or the like is to place a sheet of carbon-paper above the sheet upon which the 40 reproduction is to be made and upon this carbon-sheet to place the drawing that is to be traced. Ordinarily this work is done upon a drawing-board, the several sheets being held in proper position with respect to each other 45 by thumb-tacks or similar devices. Aside from the inconvenience and expense incident to employing a drawing-board and thumb-tacks or the like in effecting such reproductions there is always danger when the 50 picture or the like is removed in order to inspect the progress of the tracing that in re-

relative position of the sheets will not be secured, and particularly if it is desired to trace drawings or the like in a plurality of colors 55 there is danger that in removing one carbon or transfer sheet and substituting another of a different color the exact realinement of the drawing and the partially-finished tracing will not be secured.

My present invention affords a most simple, cheap, and effective means whereby the above difficulties are overcome, the construction being such that even children or persons having no skill in drawing may readily make re- 65 productions in one or more colors and may from time to time inspect the progress of their work without danger of disturbing the accurate alinement of the drawing, picture, or the like being reproduced.

In carrying out my invention I employ a plurality of transfer-sheets of different colors that are attached to a suitable support or frame in such manner that any one of these sheets may be turned to or from position for 75 use. The support or frame will comprise a part extending from that portion of the frame to which the sheets are attached, whereby the frame may be connected with the sheet to be traced, and the frame or support may be va- 80 ried in its shape without departing from the spirit of the invention. For example, it may be a two-sided frame or support, or, if preferred, a four-sided frame or support may be employed for sustaining the transfer-sheets. 85 Both these styles of frame or support are illustrated in the accompanying drawings. In Figs. 1 to 4 of the drawings a four-sided support or frame is illustrated, while in Figs. 5 and 6 the support or frame has but two 90 sides. This support or frame A in the form of the invention illustrated in Figs. 1 to 5 is flexibly connected, as by a strip a, to the back B of a pad B' of leaves or blank sheets of paper, which may be successively torn off 95 or removed as reproductions are made from time to time. The frame A in the form of the invention shown on Sheet 1 is provided with a large cut-away space or opening C, and to one edge of this frame (it may be the roo side, top, or bottom) are connected one or more carbon or transfer sheets D, D', and D<sup>2</sup>. The carbon-sheets are preferably fastened by suming the work the exact alinement and | glue, stitches, or by staples d to the under

side of the frame A, as shown. The sheets D D', &c., are preferably narrower than the opening C of the frame A, although this is not essential, the purpose of this being to en-5 able the carbon-sheets D, &c., to be turned more readily out of the way, as seen in Fig. 2 of the drawings. The frame A is provided at one or more points adjacent the edge of the opening C with suitable means for holding to the picture-sheet, drawing, or the like that is to be traced with a pencil or stylus. In the preferred form of the invention the holder of the picture, drawing, or the like is formed by cutting a slit a' through the frame A adja-15 cent the edge of the opening C. The slit a'may be provided at any point adjacent the opening C, and by means of this slit the picture, drawing, or the like to be reproduced can be accurately positioned. In the accom-20 panying drawings I have shown the frame as provided with three carbon or transfer sheets D, &c. One of these, for example, may be black, another blue, and another red. Now if it is desired to make a tracing or reproduc-25 tion of a picture that is printed upon a sheet of paper (designated as E upon the drawings, Fig. 2) this picture-sheet E will have its end passed through the slit a' and folded, as at e, under that part of the frame between the slit 30 a' and the opening C, as shown in Fig. 4 of the drawings. The sheet E, containing the picture, will then be moved laterally until the edge of such sheet reaches the end of the slit a'. In this way the sheet E will be accurately 35 positioned. Now if it be desired, for example, to trace the picture on the picture-sheet E in blue (this being the intermediate carbon or transfer sheet D') the black and red sheets D and D2, respectively, will be turned toward | 40 the left and away from the frame A, as shown in Fig. 2 of the drawings, one of the sheets being turned outward beneath the frame A, while the other is turned in the same direction above the frame. If a portion of the pic-45 ture is to be traced in black, then the frame A will be raised, the sheet D' of red carbonpaper will be turned to the left, the picturesheet E will be raised, the black transfersheet D will be turned to position, the picture-50 sheet E will be turned down onto the sheet D, and the work will be resumed. If the sheet E containing the picture to be reproduced is of sufficient length, the bottom of this sheet may be passed through the slit a'55 at the bottom of the frame A, or the side edge of the picture-sheet E may be passed through the slit a' at the side of the frame A and may be folded under, so as to secure the picture in accurate position. It will be readily understood that the de-

tails of the invention may be modified in various ways without departing from its scope. Thus, for example, instead of forming the frame A with one or more slits a' one or 65 more strips of any suitable material might be

attached to the edge of the frame, by which strip or strips the edge of the picture-sheet

E containing the picture to be reproduced might be engaged.

In Figs. 5 and 6 of the drawings the sup- 70 port or frame A is shown as consisting of an L-shaped bar, to one side of which are connected the several carbon-sheets D D', &c. The upper part of the frame A is offset from or extends at an angle from that portion of 75 the frame to which the carbon-sheets are attached and affords a means whereby the frame may be connected with the picturesheet to be traced in the space C at the side of the frame. In Fig. 5 the frame Aisshown 80 as attached to a pad B' by means of a paperclip F of familiar construction, and this same clip also serves to hold in place the picturesheet E. In Fig. 6 the frame A is shown as used in tracing pictures from the leaves of a 85 book. When thus used, the frame A will be connected by a paper-clip F with the leaf or sheet of the book immediately beneath the sheet containing the picture to be traced. The clip F will also hold in place the sheet 90 of paper whereon the picture is to be copied. One of the carbon-sheets—D, for example will then be placed over the sheet whereon the copy is to be made, and the picture-sheet E will then be turned down over the carbon- 95 sheet D. The operator will then trace so much of the picture as may be desired in the color of the carbon-sheet D, after which the picture-sheet E will be turned away, the carbon-sheet D will be turned back, and an- 100 other carbon-sheet D' will be turned to position for use. The picture-sheet E being then turned down over the carbon-sheet, the tracing of the picture may be resumed. The offset portion of the frame A need extend 105 laterally but a short distance from that portion of the frame to which the carbon-sheets are connected, but should be of sufficient length to enable the clip F to engage therewith.

I do not wish the invention to be understood as restricted to the details of construction above set out, since manifestly these may be varied within wide limits without departure from the spirit of the invention.

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So far as I am aware this invention presents the first instance of a multicolor device for tracing pictures, drawings, or the like comprising a frame or support to which is attached in any convenient manner a plu- 120 rality of transfer-sheets so arranged that any one of said sheets may be turned to or from position for use and which is adapted to be connected with the sheet to be traced.

Having thus described my invention, what 125 I claim as new, and desire to secure by Letters Patent, is—

1. A multicolor device for tracing pictures, drawings or the like, comprising a frame or support having attached thereto a plurality 130 of transfer-sheets of different colors each of said sheets being attached to said frame at one edge only whereby any one of said sheets may be turned to or from the position for use

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and means for connecting said frame with a sheet to be traced.

2. A multicolor device for tracing pictures, drawings or the like, comprising a frame or 5 support, a series of transfer-sheets of different colors attached to said frame or support, said frame or support comprising a part extending laterally from that portion of the frame or support to which said sheets are attached, 10 said extending part serving as a means whereby the frame or support may be connected with the sheet to be traced.

3. A multicolor device for tracing pictures, drawings or the like, comprising a frame hav-15 ing an opening or space through which a picture or the like may be traced, a plurality of transfer-sheets of different colors, each having one of its edges attached to said frame and having free edges whereby said sheets may be 20 turned to or from the position for use.

4. A multicolor device for tracing pictures, drawings or the like, comprising a frame having an opening or space through which a picture or the like may be traced, a plurality of 25 transfer-sheets of different colors attached to said frame at one side of said opening and a holder at another side of said opening for retaining the sheet to be traced.

5. A means for tracing pictures, drawings 30 or the like, comprising a frame having an opening or space through which a picture or the like may be traced and having a plurality of transfer-sheets of different colors attached to the frame at the edge of said opening, cer-35 tain of said sheets being narrower than said !

opening in order to pass through said opening in being turned away therefrom.

6. A means for tracing pictures, drawings or the like, comprising a frame having an opening or space through which a picture or 40 the like may be traced, and having one or more transfer-sheets attached to the frame at the edge of said opening, said frame having a slit adjacent the edge of the opening to receive a portion of the sheet containing the 45 picture, or like object to be reproduced.

7. A means for tracing pictures, drawings or the like, comprising a frame having an opening through which a picture or the like may be traced and having one or more trans- 50 fer-sheets attached to the frame at the edge of said opening, said frame being provided with a plurality of slits or holders adjacent the edge of the frame and adapted to engage the sheet containing the picture or like ob- 55

ject to be reproduced.

8. A means for tracing pictures, drawings or the like, comprising a frame having an opening through which a picture or the like may be traced, a pad consisting of leaves or 60 blank sheets whereon the pictures are traced, a strip of flexible material whereby said frame is connected to said pad at one edge, a plurality of transfer-sheets attached to said frame at one of its free edges, and suitable means 65 for holding the picture-sheet.

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Witnesses:

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