

(Model.)

W. B. O. PEABODY.

2 Sheets—Sheet 1.

Apparatus for Assisting in Drawing.

No. 228,273.

Patented June 1, 1880.

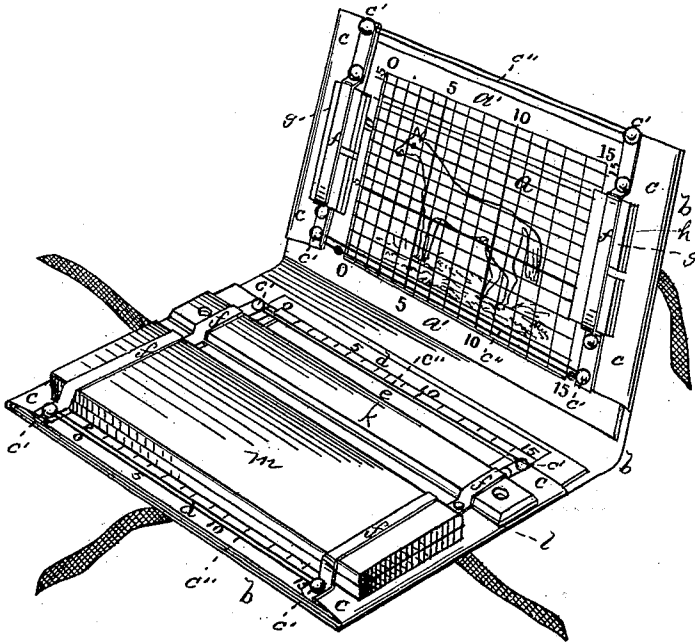


Fig. 1.

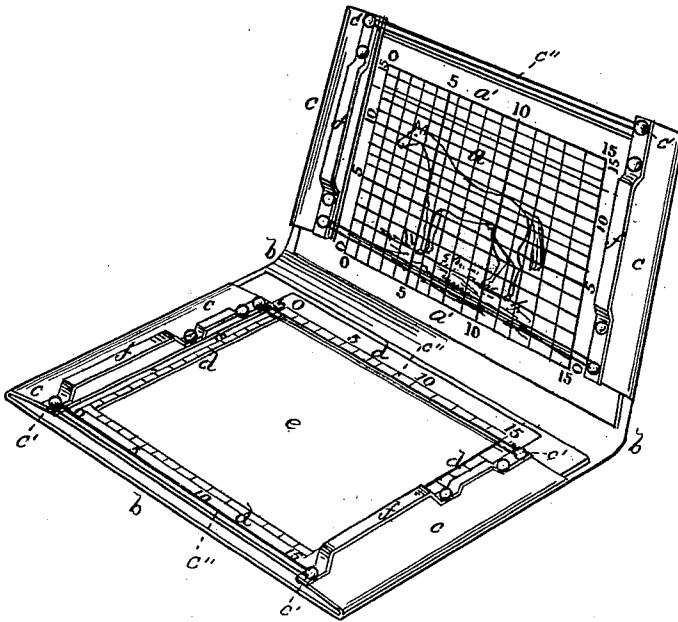


Fig. 2

WITNESSES

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(Model.)

W. B. O. PEABODY.

2 Sheets—Sheet 2.

Apparatus for Assisting in Drawing.

No. 228,273.

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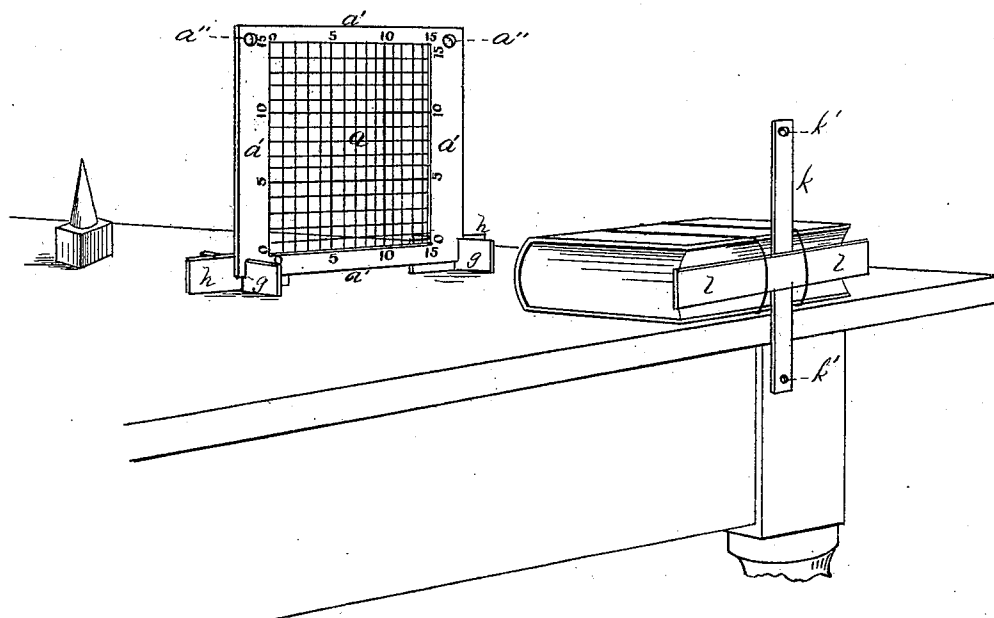


Fig. 3.

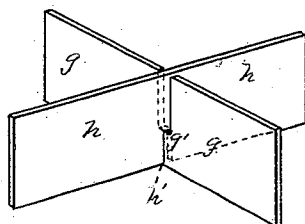


Fig. 4.

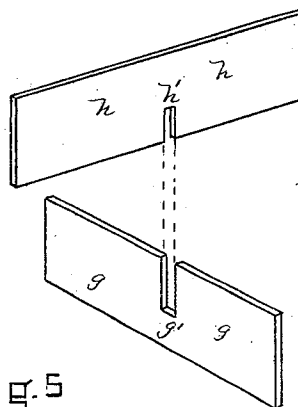


Fig. 5.

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UNITED STATES PATENT OFFICE.

WILLIAM B. O. PEABODY, OF BOSTON, MASSACHUSETTS.

APPARATUS FOR ASSISTING IN DRAWING.

SPECIFICATION forming part of Letters Patent No. 228,273, dated June 1, 1880.

Application filed March 1, 1880. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM B. O. PEABODY, of Boston, in the county of Suffolk and State of Massachusetts, have invented new and valuable Improvements in Apparatus for Assisting in Drawing, of which the following is a specification.

My invention relates to an improvement the object of which is to enable persons unskilled in drawing to draw with accuracy either from the "flat"—*i. e.*, from pictures, engravings, or imprints of any kind upon flat surfaces, or from the "solid"—*i. e.*, from objects themselves; and it consists of a transparent sheet cross-sectioned by lines which are numbered or otherwise designated upon a mat or frame surrounding the said sheet, and in a correspondingly numbered and scaled mat or frame adapted to be laid upon a sheet of drawing-paper, which can, by this means, be lined into squares exactly similar to those produced upon the transparent sheet by cross-sectioned lines, and of various auxiliary improvements, making part of this invention, all of which are for the purpose of enabling the artist to accurately reproduce upon the drawing-paper that which he sees through the transparent sheet.

My invention is described in detail below, and illustrated in the accompanying drawings, in which—

Figure 1 is a view of an open portfolio embodying the same. Fig. 2 is a similar view, with a box, rulers, and certain supporting-feet removed. Fig. 3 shows the transparent sheet removed and set up in position for drawing a solid. Fig. 4 is a view of one of the feet. Fig. 5 is a view of the same with its parts separated.

Similar letters of reference indicate like arts.

a is a sheet of transparent material, such as celatine-paper, ruled in equal squares, the lines forming which are numbered or otherwise designated upon the frame *a'*, which molds and surrounds the transparent cross-sectioned sheet.

Beneath the transparent sheet *a* lies a picture, and both picture and sheet lie upon the inner side of one of the covers of the portfolio and are held firmly in position by the flaps which extend from the ends of the portfolio

sides, and are provided with buttons *c'*, which receive the elastic cords *c''*.

d is a mat provided with a scale corresponding with the lines on the transparent sheet *a*, and with numbers corresponding with the numbers on the mat or frame *a'*.

Beneath the mat *d* is a sheet of drawing-paper, *e*, and both are held down and in place by the flaps *c*, having buttons *c'* and elastics *c''*.

In Fig. 2 the device is in position to allow of a copy being made upon the drawing-paper *e* of the picture beneath the transparent sheet *a*. The method of making such a copy is as follows: By the aid of the scales upon the mat *d* draw, with an artist's charcoal pencil, lines upon the drawing-paper *e* which will correspond with the lines upon the transparent sheet, thus reproducing upon the drawing-paper each square that appears on the transparent sheet. When this is done it is only necessary to reproduce in the corresponding squares on the drawing-paper that which is seen in the copy through the transparent sheet, and thus secure an accurate copy or duplicate of the original.

When the charcoal lines have served their purpose, if they have been drawn on good drawing-paper, they can be completely erased with a pocket-handkerchief; or, if it is desirable to sketch in water-color, they can be nearly erased before commencing, and left so faint as to be unobjectionable, but distinct enough to serve their purpose.

Held in place in the portfolio by means of bands *f f*, as shown, or by other suitable means, are foot-pieces *g h*, wooden and elastic rulers *k l*, and a box of artists' materials, *m*.

The object of the feet or foot-pieces is to support the transparent sheet when it is desired to draw in perspective. Each foot-support consists of two flat pieces, *g h*. (See Figs. 4 and 5.) The lower piece, *g*, has a cut or kerf, *g'*, sawed therein, of sufficient width to admit the piece *h*, and also the mat *a'* of the transparent sheet. The upper piece, *h*, has a cut, *h'*, of sufficient width to admit the thickness of the piece *g* only. When the pieces are placed together, as shown in Figs. 4 and 5, they make a substantial support, as shown in Fig. 3.

The wooden ruler *k* is provided with one or

more eye-holes, *k'*, which are countersunk for the purpose of securing an unvarying sight for perspective observation. The elastic ruler *l*, by the aid of rubber bands, serves to hold the ruler *k* in a firm position, as on the back of a chair, upon a book, &c., so that a steady view can be had of a solid to be drawn by the aid of the transparent sheet *a* and mats *a'* and *d*.

10 In using my device to draw from the solid, the transparent sheet *a* is fixed in the feet *g h*, and the rulers *k l* placed in position, as shown in Fig. 3. The drawing-paper *e* and mat *d* are charcoal-lined, as before described, and may remain in the portfolio or be placed in any convenient position. The object appears on the transparent cross-sectioned sheet as clearly as in the flat copy, and is as easily reproduced on the drawing-paper. The frame *a'* is furnished with holes *a''*, so that the sheet *a* may be suspended against a window for the purpose of sketching a landscape, if desired.

20 For copying pictures from books the sheet *a* can be secured over them by rubber elastics or twine without injury to the books.

25 If it is desired to enlarge the duplicate the scale on the mat *d* may be enlarged accordingly.

30 Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In an apparatus for assisting in drawing, the combination of the ruled transparent sheet *a*, provided with the mat *a'*, having figures or other designating-marks upon it corresponding with the lines upon the transparent sheet, and the mat *d*, provided with a corresponding scale and set of figures and adapted to be laid upon a sheet of drawing-paper, for the purpose of enabling lines to be drawn thereupon corresponding with the lines upon the transparent sheet, substantially as and for the purpose set forth.

2. In combination with the transparent sheet *a* and mats *a'* and *d*, the portfolio *b*, provided with the flaps *c*, having buttons *c'* and elastics *c''*, arranged and constructed substantially as and for the purpose described.

3. In combination with the transparent sheet *a* and frame *a'*, the feet *g h*, provided with the slits or kerfs *g' h'*, arranged and constructed as and for the purpose described.

4. The combination of the ruler *k*, provided with one or more countersunk eye-holes, *k'*, and the elastic ruler *l*, for the purpose of enabling solids to be drawn by means of the transparent sheet, substantially as described.

WILLIAM B. O. PEABODY.

Witnesses:

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