

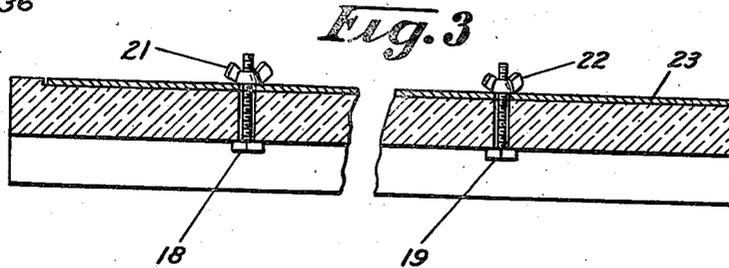
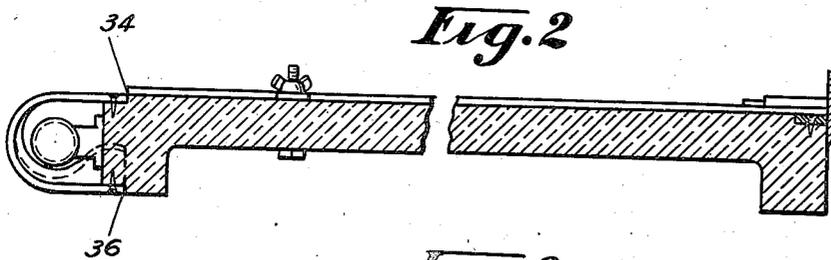
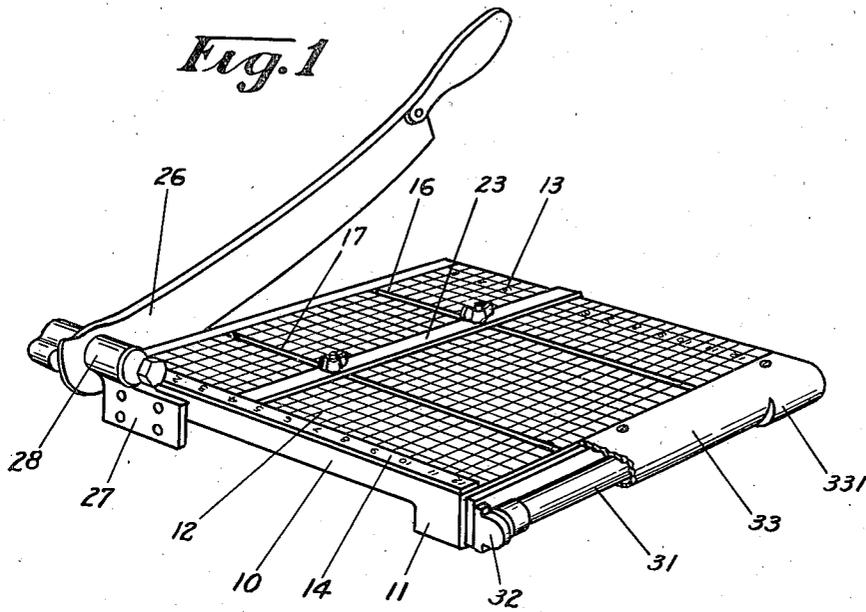
July 6, 1948.

E. F. BOWEN

2,444,723

MEANS FOR ILLUMINATING AND TRIMMING PAPER

Filed April 28, 1944



INVENTOR.
EVERETTE F. BOWEN
BY *Flournoy Corey.*
ATTORNEY.

UNITED STATES PATENT OFFICE

2,444,723

MEANS FOR ILLUMINATING AND TRIMMING PAPER

Everette F. Bowen, Cedar Rapids, Iowa, assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application April 28, 1944, Serial No. 533,123

8 Claims. (Cl. 164-44)

1

This invention relates to photographic apparatus and has particular relation to a trimming board suitable for use in dark rooms.

In the process of making photographic prints and enlargements, unexposed sensitized paper is cut to size in the dark room. It is difficult to cut this paper accurately because of the necessity for the use of very subdued illumination. Cutting boards now in use are unsatisfactory in that the subdued light of a darkroom is inadequate to illuminate any of the markings commonly used. Radium paint or the like would fog sensitized surfaces.

My invention has, for one of its objects, the provision of means for illuminating a trimming board in such manner that the light will not spoil or harm the paper or detract from its clarity when developed.

Another object is to provide a trimming means such that the paper being trimmed is illuminated by light from beneath the paper so that the edges of the paper may be readily and quickly defined and the paper accurately and sharply cut in the subdued or non-actinic light of a dark room or even in the light from the illuminating means used to illuminate the board.

Still another object of my invention is to provide a new and improved trimming board for trimming photographic paper.

Another object of the invention is to provide new and improved means for gauging prints for cutting.

Other and further features and objects of the invention will be more apparent to those skilled in the art upon a consideration of the accompanying drawings and following specifications, wherein a single exemplary embodiment of the invention is disclosed, with the understanding, however, that such changes may be made therein, as fall within the scope of the appended claims, without departing from the spirit of the invention.

In said drawings:

Figure 1 is a view in perspective of a board constructed according to one embodiment of my invention with the view taken from the rear of the board. A portion of the cover for the lighting means has been broken away to illustrate the lighting means.

Figure 2 is a view in section of the board shown in Figure 1 taken from the front of the board just to the rear of the front edge thereof, and

Figure 3 is a view in section transversely of the board and taken at a point substantially at its midsection.

2

Referring to the drawings:

In practicing my invention I provide a board or table constructed of plastic or glass which will transmit light. This board may be a rectangle, illustrated at 10, with legs or pedestals 11 on each corner, or the entire board may be moulded at one time in a single unit. The surface of the board is ruled or scored with lines 12 to indicate one-half inch squares or any other suitable divisions. The vertical lines are numbered from the right-hand edge of the board, as indicated at 13, and also a strip 14 of plastic which is part of the plastic base, located at the top of the board, is provided with numerals to indicate the spacing 15 from the trimming edge of the board. The horizontal lines may be used to indicate the vertical dimensions of the print. These lined and numbered scales are preferably illuminated by non-actinic light as will be hereinafter described.

I preferably provide a pair of transverse slots 16 and 17 in the board adapted to receive adjusting bolts 18 and 19, and these bolts are provided with wing nuts 21 and 22 for the purpose of clamping a vertical strap or bar of opaque plastic 23 to the face of the board. This vertical bar 23 may be set at any desired spacing from the trimming edge of the board so that a print may be cut to any desired size.

The board is provided with a trimming knife 24, and this knife is secured to the upper right-hand edge of the trimming board by means of a bracket 27 and the usual hinge structure illustrated at 28.

In order to illuminate the board I provide means for directing light into the edge of the board. Since the board is made of a transparent or translucent material, the light can readily pass through the width of the board and enough light escapes through the surface of the board to furnish an illuminated background on which the prints rest. This illumination is sufficient to illuminate and accentuate the scales so as to enable the operator to readily see lines on which to cut, but is not enough to cause any fogging of the paper.

A preferred means for directing light into the board is by means of the tube light 31, shown at the left-hand end of the board. This tube light may be a fluorescent lamp or an incandescent type of lamp as desired, just so that the illumination therefrom is not so great as to fog the paper. The luminous tube 31 is supported by means of clips at either end, such as that illustrated at 32.

I have not shown electrical connections for this

3

tube, since any suitable conductors may be employed. Starters and the like may be housed either within the cover 33 or within the board itself.

The cover 33 is a U-shaped member, the ends of which are illustrated at 331 and are sufficiently wide to permit the cover to be received in suitable grooves 34 and 36 on the upper and lower edges of the board and this cover may be held in place either by friction or by means of screws as illustrated.

I preferably utilize pedestals at the corners of the board and therefore the portion of the cover 33 intermediate the ends is of decreased transverse dimensions so that it will tightly engage the upper and lower surfaces of the board.

This cap or end cover 33 is preferably opaque and can be constructed of plastic, sheet metal or the like as desired. The board itself is preferably made of colored material such as red, green or amber colored plastic, so as to subdue the light emanating from the board and render it non-actinic. The tint of the board should be of sufficient density to sufficiently subdue the light so that prints will not be fogged. The ruler strip or gauge 23 is of plastic and is preferably black or opaque. The knife is of course of metal and is also black.

The contrast of colors and black and light colored members is not only pleasing and attractive, but is of considerable value in outlining the paper and outlining the various members of the cutting board.

Although I have shown and described a specific embodiment of my invention, it is apparent that modifications thereof may be made by those skilled in the art. Such modifications may be made without departing from the spirit and scope of my invention as set forth in the appended claims.

I claim as my invention:

1. In a trimming device including a cutter, a cutting board of plastic material, a light source, supporting means for said light source on one edge of the said board, and an opaque cover disposed over the light source and engaged on the edge of the board.

2. In a device of the character described, a trimming board of plastic material, a trimming knife secured to one corner of the board and adapted to engage one edge thereof, a cutting edge on the edge of the board against which the knife is operatively engaged, means for illuminating and projecting light into a smaller face of the board and means for shielding the said illuminating means to permit illumination of said smaller face only of the board.

3. In a trimming device, a light transmitting cutting board having a light-transmitting indicating scale thereon and a source of light attached at a smaller-aread surface of the board to project light therein, whereby said light will

4

pass into said board and scale to illuminate said scale from within.

4. In a trimming device, a light transmitting cutting board having an indicating scale thereon, a source of light arranged to be projected into a smaller face of said cutting board, whereby said light will pass into said board and illuminate said scale from within and means for shielding the said source of light to permit the passage of light only to the said smaller face of said cutting board.

5. In a trimmer, the combination with a body portion, trimming means arranged along one edge of said portion, of a scale member formed of light transmitting material positioned along another edge of said portion, and means for applying non-actinic light to illuminate said member.

6. In a trimmer, the combination with a body portion, trimming means arranged along one edge of said portion, of an elongated scale member formed of light transmitting material positioned along another edge of said portion, and means adapted to apply non-actinic light to said member for transmission therealong to illuminate said scale member.

7. In a trimmer, the combination with a body portion, trimming means arranged along one edge of said portion, of a scale member formed of light transmitting material positioned along another edge of said portion, and means for applying a non-actinic light to one end of said member for transmission therealong to illuminate said scale.

8. In a trimmer, the combination with a body portion, trimming means arranged along one edge of said portion, of a flat elongated scale member formed of transparent material and positioned along another edge of said portion, and a non-actinic light source positioned at one end of said member for supplying non-actinic light to said member for transmission along said member to illuminate the latter.

EVERETTE F. BOWEN.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

| Number | Name | Date |
|-----------|--------------------|----------------|
| 118,419 | Wood | Aug. 22, 1871 |
| 380,683 | James | Apr. 10, 1888 |
| 538,066 | Conde | Apr. 23, 1895 |
| 541,503 | Rasoux | June 25, 1895 |
| 1,113,263 | Ulrich | Oct. 13, 1914 |
| 1,172,127 | Fritch | Feb. 15, 1916 |
| 1,267,055 | Cathcart | May 21, 1918 |
| 2,238,857 | Ford | Apr. 15, 1941 |
| 2,344,502 | Boice | Mar. 21, 1944 |
| 2,347,665 | Christensen et al. | May 2, 1944 |
| 2,358,203 | Best | Sept. 12, 1944 |
| 2,378,249 | Ruth | June 12, 1945 |