

Jan. 2, 1940.

F. M. LUND

2,185,985

TRIMMING BOARD

Filed June 10, 1939

2 Sheets-Sheet 1

Fig. 1

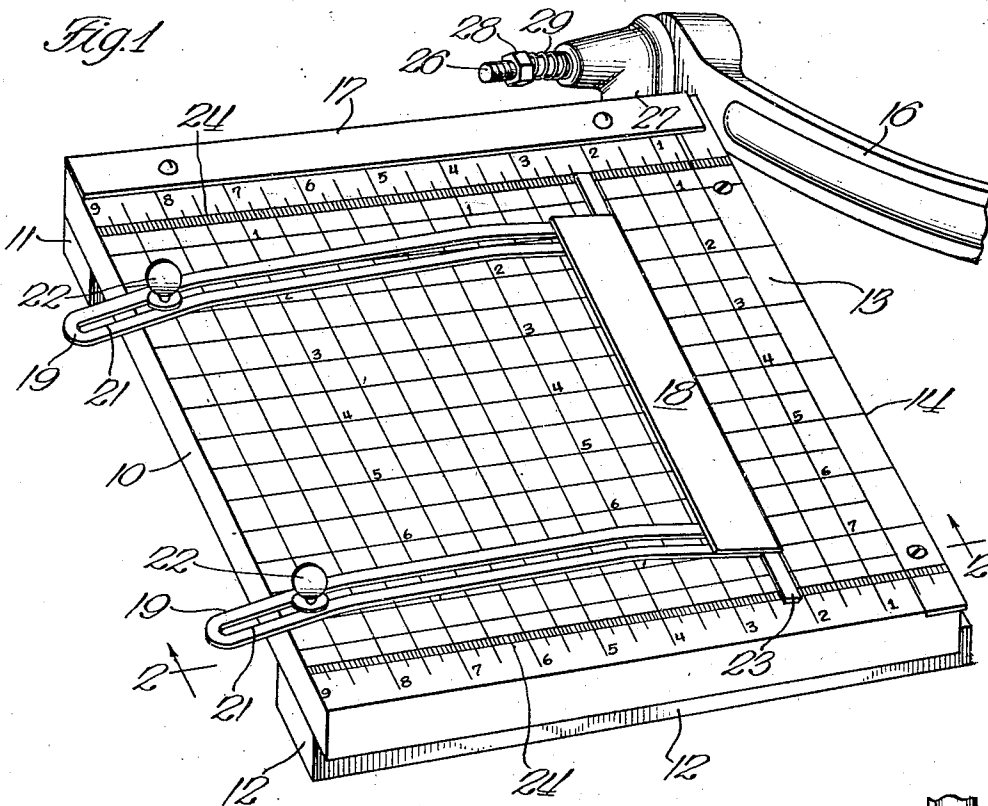
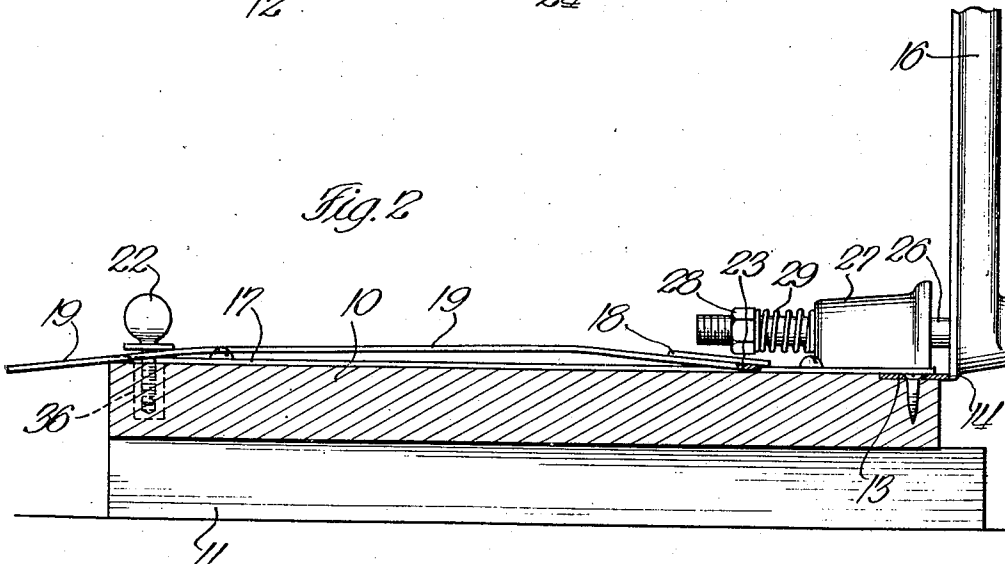


Fig. 2



INVENTOR.
Frank M. Lund
BY *McLaughlin & Hallenstein*
ATTORNEYS

Jan. 2, 1940.

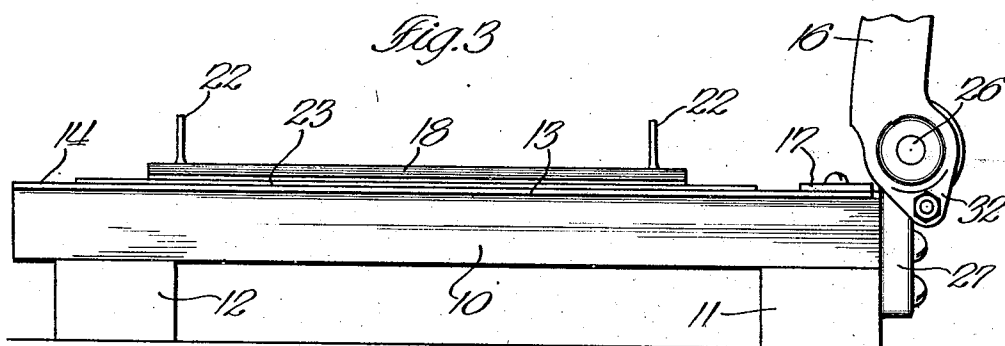
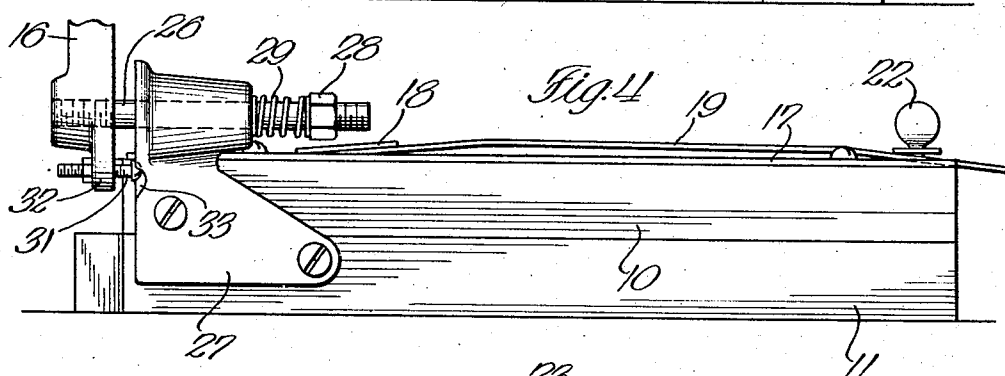
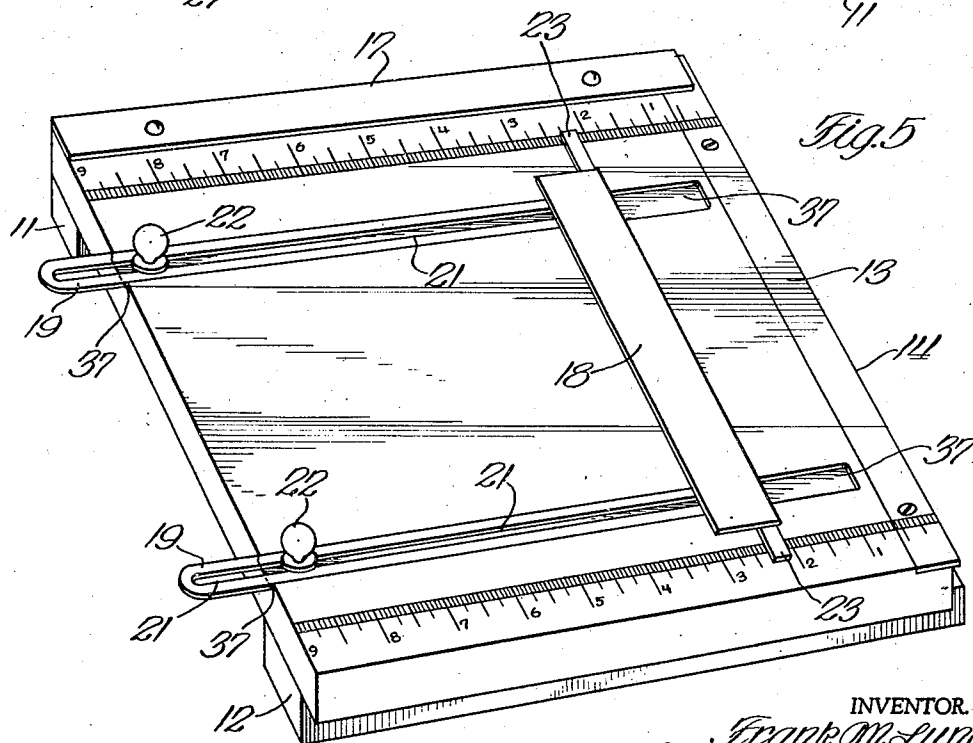
F. M. LUND

2,185,985

TRIMMING BOARD

Filed June 10, 1939

2 Sheets-Sheet 2



INVENTOR

INVENTOR
Frank M. Lund

BY *McLaughlin & Hallenstern*

ATTORNEYS

UNITED STATES PATENT OFFICE

2,185,985

TRIMMING BOARD

Frank M. Lund, Chicago, Ill., assignor of fifty per cent to Adolph I. Blanc, Chicago, Ill.

Application June 10, 1939, Serial No. 278,474

4 Claims. (Cl. 164—44)

My invention relates to trimming boards, such as those employed for trimming photographs.

The invention has for its object the provision of an improved trimming board having certain desirable features not heretofore employed on this type of equipment.

Trimming boards have been produced for a long period of time wherein a cutting edge was disposed along one side of a generally rectangular member and a cutting knife pivoted near the cutting edge acted to shear sheet material projecting over the cutting edge. Conventionally, this type of trimming board has been provided with cross lines on its upper surface dividing the board into squares, generally an inch each way, and, at the top of the board, a scale was provided showing the distance from the cutting edge in either inches or metric figures. This type of trimming board has been identified almost entirely with photographic work and as a consequence has often been referred to as a photographic paper trimmer. Its simplicity and utility have been so well known that its marked disadvantages in many instances have not been given consideration.

As one illustration, it is almost impossible to work in a dark room and expect to get any degree of accuracy, since the paper must be held carefully along the ruled lines in order to square it up for cutting. Even when it is employed outside of a dark room, it is practically impossible to obtain adequate cutting speed because of the time required to true up the paper to the lines ruled on the board. This is particularly true when an attempt is made to use the old trimming board as a semi-production implement, a manner in which it is often used in small photographic establishments. As an example, it may be desired to make enlargement prints of a size not standard, and the most advantageous way of accomplishing this is to cut photographic print paper from larger sheets into sheets of a size desired, and this must be done in a dark room, and the operation may be repeated time after time. The black or brown ruled lines on the old, natural wood colored board, cannot be seen readily in a dark room; if they can be seen faintly, it takes a great deal of time to arranged the paper on the board so that it will cut in the rectangular shape usually desired.

The disadvantages outlined above are illustrative and are suggestive of specific objects of the invention and the functions and advantages secured by my invention, as brought out in the following specification.

In the drawings,

Fig. 1 is a fragmentary perspective view showing a preferred embodiment of a trimming board made in accordance with my invention;

Fig. 2 is a sectional view, taken on the line 2—2 of Fig. 1;

Fig. 3 is an end elevational view looking toward the cutting edge;

Fig. 4 is a fragmentary elevational view, looking at the trimming board at right angles to Fig. 2; and

Fig. 5 is a fragmentary perspective view showing a modified construction.

Reference will be had first to the embodiment shown in Figs. 1 to 4, inclusive. The trimming board comprises a rectangular base member 10, preferably formed of wood, having strips 11 and 12 preferably running against the grain of the wood to form a firm, non-warpable structure. Inset in one edge of the rectangular base member, and partly overlapping the same, is a metal strip 13 having a cutting edge 14 with which the knife 16 is adapted to cooperate to produce a shearing action. A straight edge abutment 17 is secured to another edge of the base member, but projects above the plane upper surface of the base member to form an abutment against which the edge of the paper may lie. The strip 13 carrying the cutting edge and the straight edge abutment 17 are at right angles to each other.

A guide member 18 is carried at the ends of guide and supporting rods 19 bifurcated to leave a longitudinal slot 21 through which the shanks of thumb nuts 22 extend, these thumb nuts being threaded in suitable metal inserts in the base member. Immediately above the shank portion of the thumb nuts, a flange is provided for engaging the rods 19 and holding them rigidly against the face of the base member. The rods, as shown in Fig. 2, are slightly curved upwardly so that when the nuts 22 are tightened, the guide member 18 will be held firmly against the face of the base member. Secured to the underside of the guide member 18, as by welding, so as substantially to form a part thereof, is a strip 23 functioning as a stop and running entirely across the guide member 18 and extending beyond it at both ends thereof. When the nuts 22 are tightened, therefore, it is the stop strip 23 which is held firmly against the face of the base member.

Near the top and bottom edges of the upper surface of the base member, I provide graduated scale sections 24, the graduations being either in inches or in metric equivalents thereof. The scales comprising the scale sections 24 are so ap-

plied as to show the distance from the cutting edge 14.

The cutting blade 16 carries a generally right angular pin 26 pivoted in a bracket 27 secured to the base member. A screw 28 is adjustable on a threaded end of the pin 26 to regulate the tension on a spring 29, and a relatively small, round headed bolt 31 is secured in a fixed position on a tail piece 32 of the cutting blade. As the drawings show, the portion of the bracket 27 within which the pin 26 is pivoted is rounded but has a slight recess 33.

With this construction, the functioning of the cutting arm is as follows: The spring 29 tends to move the pin 26 to the right, when looking at Fig. 4, and as the cutting knife is raised to a vertical position, the rounded head of bolt 31 moves to the right with the entire assembly and falls into the recess 33 as a stop so that the cutting blade can be left in an upright position ready for operation. As the blade is brought downwardly, the rounded head of bolt 31 rides out of the recess, throwing the entire blade assembly slightly toward the left, looking at Fig. 4, until the blade engages the straight edge where it is brought still further to the left by this engagement. The tension on the spring is adjusted to control the amount of friction and, therefore, to a certain extent, the cutting action between the blade and cutting edge 14. If it should be desired, considerable tension may be placed on the spring 29 so that, if the cutting blade should be knocked down by accident, its movement will be arrested when it first engages the cutting edge 14 and it will not fall all the way down and possibly cause injury if the fingers or other part of the operator's body should be in the way. It will be noted that the supporting strip 12 projects outwardly from the base member 10 a sufficient distance to act as a stop for the cutter blade.

The principal advantages from the use of my invention flow from the guide arrangement. If paper is to be trimmed to various sizes, that is to say, if there is not a relatively large number of one size paper to be cut, the entire guide assembly may be removed by simply removing the thumb nuts 22 and lifting the assembly out of position. The only aperture on the top of the board will then be the screw aperture in the metal inserts 36 (Fig. 2) which are placed therein to receive the thumb nuts 22. The top face of the board is square ruled and, in addition, the scale sections 24 are provided at top and bottom so that sheets may be cut square and to any size possible depending upon the dimensions of the board. At at least one point I number the lines running parallel to the regular scales, so that the dimension of the paper in both directions is readily ascertained. The board can be used in all respects in exactly the way that the boards of the prior art have been employed, but with the added facility which comes from the arrangement of scales.

If, however, several sheets are to be cut to the same size, the guide 18 is set to that size and, the extending ends of stop strip 23 being contiguous to the two scales, the guide may be very accurately positioned and the nuts 22 tightened. Because of the slight curve of the rods 19, tightening of the nuts 22 holds the strip 23 against the top face of the board and there is no possibility of the paper slipping under the stop at any point. Since the guide is lined up accurately, it is unnecessary to use the straight edge abutment 17 during a cutting operation, but it may be used

if the operator should desire to do so. If the paper being cut runs the full dimension of the board, of course, it is necessary to bring it up close to the straight edge abutment 17. Preferably, I give the board an ebony finish with the scales finished in white, the guide being preferably a white metal, so that the operator can see readily when he is working in the dark room. The photographic paper, which is usually white, will, of course, contrast with the black color of the board so as to make it possible to see with the limited light available in the dark room.

In the embodiment shown in Fig. 5, I apply the same reference characters as those employed in the first described embodiment, the board in all respects being similar to the first described board with the exception that the rods 19 are recessed in slots 37 provided in the face of the board. The straight edge abutment 17, cutting edge 14, and construction of the guide and stop strip 23, and other features are, as shown, substantially identical. An advantage of the arrangement of Fig. 5 is that the guide 18 does not have to be trued up parallel to the cutting edge 14, since it is always held in position because of the rods 19 being in the slots 37. The embodiment of Fig. 5, however, suffers by comparison in some respects with the embodiment of Figs. 1 to 4, inclusive, because it is somewhat more expensive to manufacture, the slots 37 when exposed are apt to leave marks on certain types of paper, and the stop strip 23 is not held as rigidly to the face of the board as in the first embodiment. When the guide is mounted as shown in Fig. 1, some angularity can be imparted to the guide so that to some extent at least paper may be cut on the bias in the unusual case where this might be found to be desirable. In connection with the embodiment of Fig. 5, and, for that matter of course, also the embodiment of Fig. 1, the guide may carry only a stop point in place of a stop strip, and, in that case, the straight edge abutment 17 would be depended upon to true up the paper so that a right angular corner would be produced. The strip strip has many advantages in actual use.

Because of the construction and arrangement of the paper guide, I find it possible to cut several thicknesses of paper at a time and still maintain the requisite accuracy. Several thicknesses of paper can be slipped into the recess occupied by the stop strip 23, and if they are held in position while operating the cutting knife, the cutting action will be in the nature of a true right angular shear through all of the sheets of paper.

There are other minor advantages flowing from the features described, the scope of which features, in combination, is defined in the appended claims.

What I claim as new and desire to protect by Letters Patent of the United States is:

1. In a trimming board of the character described a rectangular base member having a plane top face and a metal cutting edge along one side thereof, a cutting knife pivoted to said base member near one end of said cutting edge, a straight edge abutment running along one side of said base member at right angles to said cutting edge, a guide member having a stop strip below it set back from the guide member to leave a transverse recess facing said cutting edge, underneath which recess one edge of a paper sheet may extend, a pair of guide and supporting rods having their ends secured to the guide member, said guides bifurcated to form a

longitudinal slot, and extending in a direction away from the cutting edge, and fastening means extending through said slots and threaded in the base member near one edge thereof, whereby
5 to hold the guide member in any selected position with respect to the cutting edge on said plane top surface.

10 2. A trimming board as defined in claim 1, including a scale near opposite edges of said plane top surface running parallel to said straight edge abutment, said top strip extending from said guide member at each end so as to lie along said scales, whereby quick adjustment of the position of the guide member may be made.

3. A trimming board as defined in claim 1, wherein said guide and supporting rods are curved upwardly intermediate their ends away from said plane top surface, whereby tightening of said fastening means causes said stop strip of
5 the guide member to be pressed tightly down against said plane top surface.

4. A trimming board as defined in claim 1, wherein said guide and supporting rods lie in slots in the face of said base member running at
10 right angles to said cutting edge.

FRANK M. LUND.