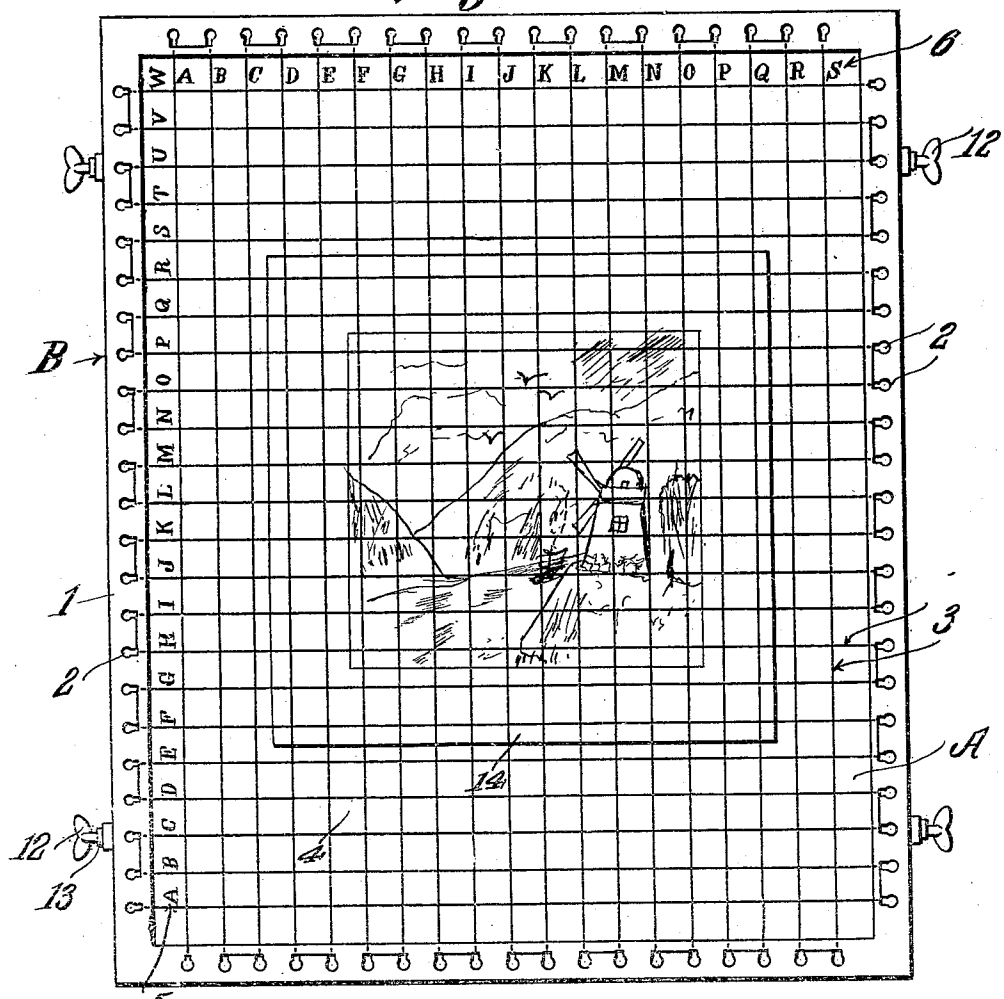
G. F. LATTIER.

DEVICE FOR REPRODUCING AN OBJECT ON A SCALE.

APPLICATION FILED MAR. 30, 1910.

961,359. Patented June 14, 1910.

Fig. 1.



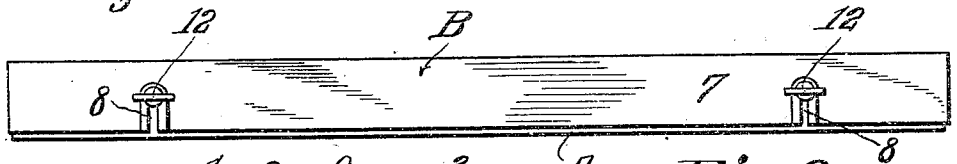


Fig. 2.

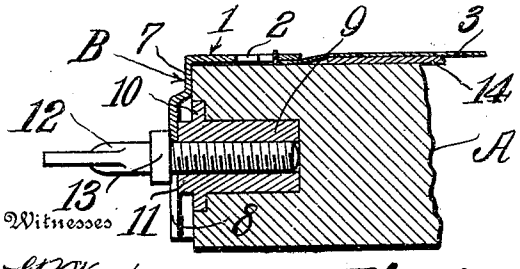


Fig. 3.

Witnesses

S. B. Wooden.

E. Walton Brewington.

Inventor

George F. Lattier.

By Henry F. Brewington,

Attorney

UNITED STATES PATENT OFFICE.

GEORGE F. LATTIER, OF BALTIMORE, MARYLAND.

DEVICE FOR REPRODUCING AN OBJECT ON A SCALE.

961,359. Specification of Letters Patent. Patented June 14, 1910.

Application filed March 30, 1910. Serial No. 552,344.

To all whom it may concern:

Be it known that I, GEORGE F. LATTIER, a citizen of the United States, residing at Baltimore city, State of Maryland, have invented certain new and useful Improvements in a Device for Reproducing an Object on a Scale, of which the following is a specification.

My invention relates to an improvement in drawing devices, and has for its object to provide a guide for the measuring of objects for the purpose of being transferred and reproduced on an enlarged or reduced scale.

The invention has for a further object to provide a device for the dividing and laying off of the object to be transferred into a number of squares, without defacing or mutilating the object to be transferred, the squares serving as a guide whereby the object being transferred may be easily and accurately reproduced on an enlarged or reduced scale as may be desired.

With the foregoing objects in view, my invention consists in certain novel features of construction and combinations of parts, which will be hereinafter described and pointed out in the claims.

Referring to the drawings forming a part of this specification, Figure 1 is a plan view of the invention; Fig. 2 is a view in side elevation, and Fig. 3 is a fragmentary sectional view, the section being taken through one of the clamping members, a portion of the object to be reproduced shown in position.

A, represents the body part of the device, which may be made from any suitable material, preferably wood, on account of its lightness and cheapness.

B indicates the frame, made from any suitable material, preferably metal, provided with an inturned flange 1, having a plurality of eyelets 2, spaced predetermined distances apart provided therein.

Secured through the eyelets, and extended longitudinally and transversely of the frame is provided a lacing 3, made from any suitable material, preferably silk, dividing the space surrounded by the frame into squares 4.

Provided on the inturned flange 1, and extended longitudinally and transversely of the frame, and indicative of the lines forming the squares 4 by the lacing 3 are provided a series of letters indicated 5 and 6 respectively, the purpose of which will presently appear.

Depending from the inturned flange 1, at right angles thereto is a flange 7, having a plurality of slots 8, provided in the lower edges thereof at predetermined locations, the depending flange 7 adapted to fit around the body part A.

In the edges of the body part A, at predetermined locations, corresponding to the locations of the slots 8 in the flange 7, are provided a plurality of sockets 9, having shoulders 10, and extensions 11 provided thereon, into which sockets are secured thumb screws 12, adapted to extend through the slots 8 in the flange 7, and screwed against the said flange, thereby securing the flange 7 between the shoulder indicated 13 on the thumb screws, and the extensions 11 on the sockets, thereby securing B on the body part A, as shown in Fig. 3.

My invention is operated as follows; an object to be reproduced such as a pictorial illustration indicated 14 in Figs. 1 and 3, for the purpose of illustration, is first placed upon the body part A, the frame B is then placed over the body part with the squares 4, formed by the lacing 3, over the object 14 desired to be reproduced. The frame B is then pressed downward about the body part A, until the lacing 3 is drawn tight across the body part, and is then secured in this position, with the object to be reproduced interposed between the body part and the lacing 3, by screwing the shoulders 13 of the thumb screws 12, against the flange 7, interposed between the shoulders 13 and the extensions 11 on the sockets 9. The distances between the longitudinal lines indicated by the letters 5, and the transverse lines indicated by the character 6, are then measured and ascertained, and similar lines are then drawn on the material on which the object is to be reproduced, either at increased or reduced distances apart as may be desired to meet the requirements, for purposes of enlargement, the space between the respective longitudinal and transverse lines is increased, and to the contrary if it be desired to reproduce the object on a reduced scale. The squares drawn on the material on which the object is to be reproduced correspond with the squares 4 of the device, save that when the object to be reproduced is to be enlarged then of course the squares are larger as above explained, and to the contrary when

the object is to be reproduced on a reduced scale. The lines forming the squares on the material on which the object is to be reproduced are then designated with letters to correspond with the letters indicated 5 and 6 respectively on the device, it will be readily observed that the squares of the device over the object to be transferred will act as a guide relative to the squares on the material on which the object is to be reproduced, the squares 4 being indicative of a corresponding square on the material on which the object is to be reproduced, as much so, as if the squares were marked off on the object itself.

By the use of my invention, the marking or laying off of the object in squares on the object itself, as is now the common custom for the purpose of reproducing the object, either on the same, or on an enlarged or reduced scale is obviated, and the possibility of defacing or mutilating the object is eliminated. It necessarily follows that the reproduction of an object on the same scale as that of the original may be accomplished in the same manner just described, by marking off the squares on the material on which the object is to be reproduced of the same size and corresponding to those of the device.

Slight changes and alterations might be resorted to in the form and arrangement of the several parts described, without departing from the spirit and scope of my invention, hence I do not desire to limit myself to the exact construction as herein set forth; but,

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

1. A device of the character described, comprising a body part, a frame composed of an inturned flange having a plurality of eyelets provided therein and a flange depending therefrom, at right angles thereto, a lacing extended through the said eyelets, longitudinally and transversely to the said flange, and a plurality of thumb screws provided on the said body part, adapted to engage with the said depending flange, whereby the said frame is secured on the said body part, substantially as described.

2. A device of the character described, comprising a body part having a plurality of sockets provided therein, a frame composed of an inturned flange having a plurality of eyelets provided therein, and a flange depending therefrom, at right angles thereto, having a plurality of slots provided in the lower edges thereof, a lacing extended through the said eyelets, longitudinally and transversely of the said flange, and a plurality of thumb screws secured within the said sockets, adapted to engage the said depending flange through the slots provided therein, and thereby secure the said frame on the body part, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE F. LATTIER.

Witnesses:
E. WALTON BREWINGTON,
MARY M. MAGRAW.