

A. B. DOGGETT.
DRAWING INSTRUMENT.
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1,401,591.

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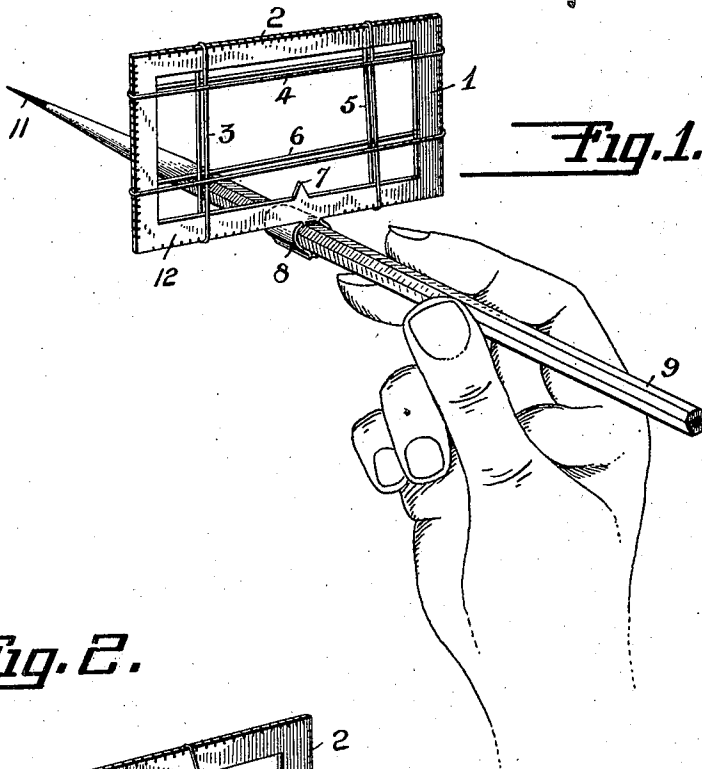
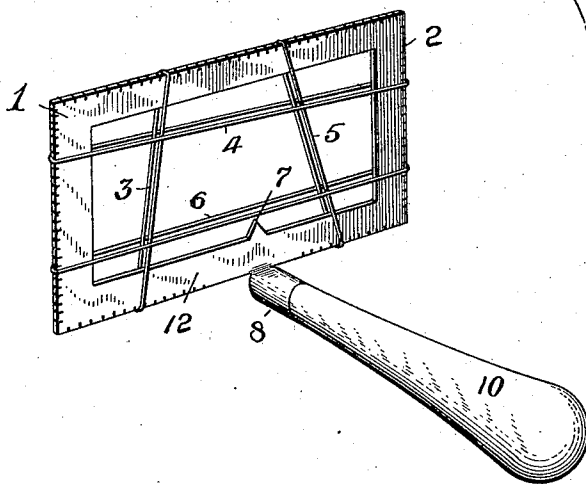


Fig. 2.



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To all whom it may concern:

Be it known that I, ALLEN B. DOGGETT, a citizen of the United States of America, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Drawing Instruments, of which the following is a specification.

This invention relates to instruments for assisting pupils in learning drawing, especially the proper appreciation of perspective in free hand sketching of school room or geometric objects. The usual practice in teaching free hand sketching is to train the pupil to use his pencil held at arms length and horizontal and substantially perpendicular to the line of sight for obtaining angles, relative dimensions, etc., the latter being done with the thumb and pencil point. Such method, while simple, often fails since a large percentage of the average class of pupils will not hold the pencil horizontal, or cannot judge the apparent angle made by a line of the object with the pencil with any degree of accuracy.

The object of this invention is to devise a simple instrument which can be used by any child for assisting him in obtaining true perspective angles and dimensions. A further object is to employ a device which is so simple that the ordinary articles of the drawing room may be made use of.

Referring to the drawings showing possible embodiments of the invention,—

Figure 1 is a perspective view of one form of the invention.

Fig. 2 is a similar view of a slightly modified form also showing the adjustable sighting means in a different position.

The principal portion of the invention comprises a rectangular frame 1 preferably of sheet material such as sheet brass. The edges 2 of said frame may be knurled or notched for the purpose of preventing slipping of the transversely extending members 3, 4, 5, and 6 which serve a somewhat similar purpose to the cross-hairs of a telescope and may be conveniently termed cross-hairs for want of a better term. Said cross-hairs may be in the form of a string or thread or preferably small rubber bands which keep their tension and may readily be placed at an angle as indicated in Fig. 2. A sight such as point 7 on the frame may be provided to be used

in sighting on the object in the connection hereinafter described. The frame may be provided with a clasp 8 preferably struck from the same piece of sheet material as the frame and point 7 are struck from. Said clasp is adapted to inclose a suitable handle for which purpose a drawing pencil 9 of the pupil may be made use of as indicated in Fig. 1 or a handle 10 provided as indicated in Fig. 2.

The point of the pencil 11 furnishes a convenient sighting means in connection with the sight 7 to assure the holding of the frame in a position at right angles to the line of sight so essential to the securing of the proper angles and dimensions of the observed object. In using my invention the pupil holds the pencil with the frame secured thereto somewhat as shown in Fig. 2 between him and the object, the frame being at right angles to the line of sight with the base level 12 of the frame horizontal. The rubber bands are then moved so as to coincide with the apparent lines of the object. This will give the pupil at once the correct perspective angles and at the same time the correct apparent proportions of the object. Thus the pupil would find that the top of a square box seen in perspective should not be drawn as a square but as a trapezium, as indicated in Fig. 2.

The device is also useful in obtaining the relative dimensions of the major and minor axes of a circle seen in perspective.

In accordance with the provisions of the patent statutes, I have herein described the principle of operation of my invention, together with the apparatus, which I now consider to represent the best embodiment thereof, but I desire to have it understood that the apparatus shown is only illustrative and that the invention can be carried out by other means. Also, while it is designed to use the various features and elements in the combination and relations described, some of these may be altered and others omitted without interfering with the more general results outlined, and the invention extends to such use.

Having described my invention, what I claim and desire to secure by Letters Patent is:

1. As an article of manufacture, a drawing device comprising a rectangular frame of sheet material, having adjacent the center

of the bottom thereof a clasp adapted to receive a pencil and a sighting apex immediately above said clasp.

2. As an article of manufacture, a drawing device comprising a rectangular frame of sheet material, having integrally formed therewith at the bottom in the substantial center thereof a clasp adapted to receive a pencil and a sighting apex immediately
10 above said clasp.

3. As an article of manufacture, a drawing

device comprising a rectangular frame of sheet material, having incisions along opposite edges adapted to receive a rubber band and a sighting apex within and at substantially the center of the bottom of the frame and means connected to said frame underneath said apex for holding the frame. 15

In testimony whereof I have affixed my signature.

ALLEN B. DOGGETT.