R. B. WARE.

SKETCH BOARD.

APPLICATION FILED JULY 5, 1917.

1,290,811. Patented Jan. 7, 1919.

Fig 1

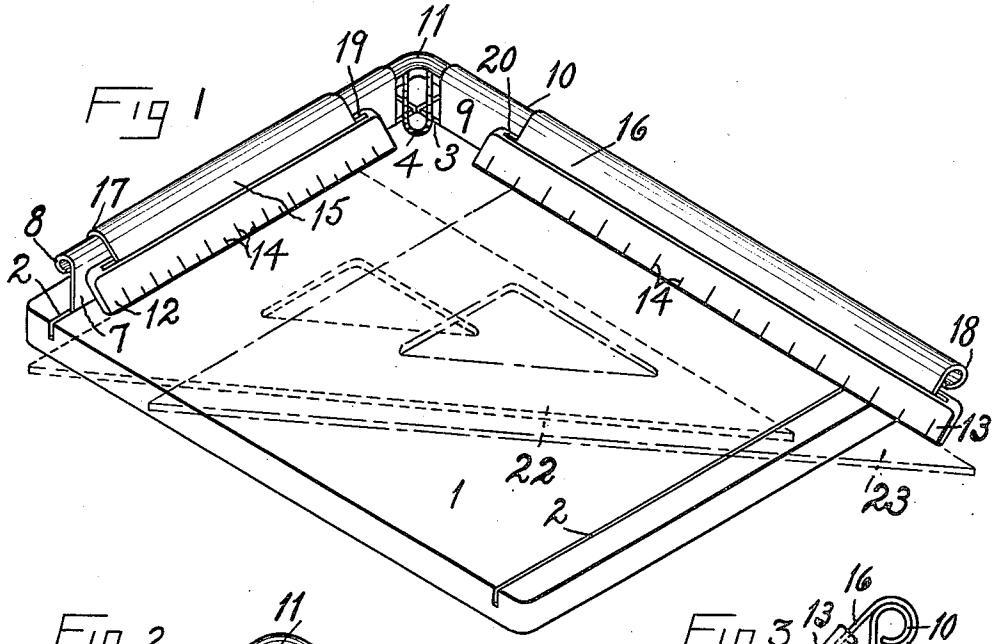


Fig 2

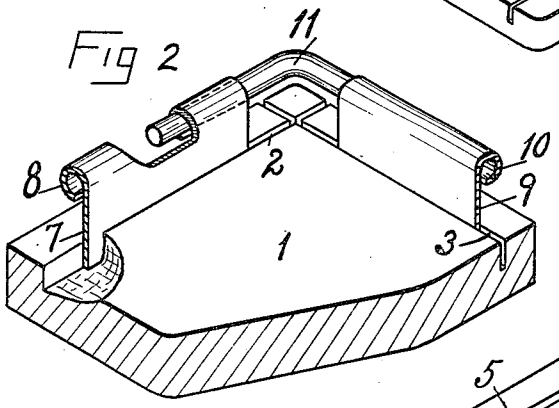


Fig 3

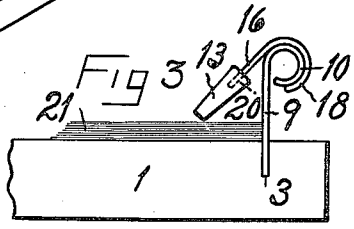
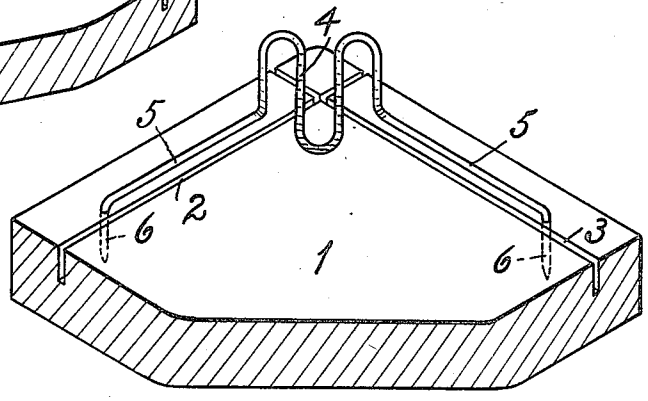


Fig 4



WITNESS:

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SKETCH-BOARD.

1,290,811. Specification of Letters Patent. Patented Jan. 7, 1919.

Application filed July 5, 1917. Serial No. 178,544.

To all whom it may concern:

Be it known that I, RODNEY B. WARE, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Sketch-Board, of which the following is a specification.

My invention relates to improvements in appliances for the use of mechanical engineers and draftsmen in making sketches, and consists of a base or board proper equipped with certain peculiar paper-holding means and triangle guides which are adjustable, all as hereinafter set forth in detail.

One object of my invention is to produce a simple and convenient sketch board with which no T-square or separate scale or rule is required, but a triangle only, thus rendering it much easier to make sketches than when either the T-square or separate rule or both are necessary adjuncts, and effecting a saving in time as well.

Another object is to provide such a board with convenient and secure means for holding one or more sheets of paper up to the full capacity of the device.

Still another object is to provide triangle or implement guides which serve also as scales or rules, and assist the other paper-holding elements in their function.

Other objects and advantages will appear in the course of the following description.

I attain the objects and secure the advantages of my invention by the means illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a sketch board which embodies a practical form of my invention, two positions of a triangle on said board being represented in dotted or broken lines and dot-and-dash lines, respectively; Fig. 2, an enlarged detail in perspective of a corner portion of said board, showing fragments of the two side abutments and the angular connecting member or brace therefor, a portion of the roll or bead at the top of one of said abutments being broken out to disclose the contiguous end of said brace; Fig. 3, an enlarged fragmentary detail of the board and a quantity of paper thereon, showing one of said abutments and one of the guides, all being in end elevation, and, Fig. 4, an enlarged view of a portion of the board, relatively similar to Fig. 2, but showing in perspective the paper-holding clip which is omitted from said Fig. 2, and without the abutments and brace shown in Fig. 2.

Similar reference characters designate similar parts throughout the several views.

At 1 is represented the board proper or base of my device, upon which the paper rests and the work of drawing or sketching is done. This base is rectangular, may be of any suitable and convenient size, and is either square or oblong. For the purposes of this description it will be assumed that the base 1 is oblong. Two slots 2 are cut in the upper surface of the base 1 adjacent to the two short edges thereof and parallel therewith, and a slot 3 is cut in said surface adjacent to and parallel with one of the long edges thereof. There might be only one slot 2 and the slot 3 might be duplicated adjacent to the other long edge of the base 1, but the three slots are usually quite sufficient for any purpose, as will presently appear.

A resilient, triple U-shaped clip 4 is provided at one corner of the base 1. The clip 4 has horizontal arms 5—5 which are arranged at a right-angle to each other, and provided at the ends with prongs 6—6 that are driven into the base 1 just outside of the adjacent slots 2 and 3, such arms resting on said base. The clip 4 has a forwardly-extending U-shaped part which bears forcibly on the base 1 or on a sheet or sheets of paper placed on said base, and so holds said paper to said base, and said clip has two rearwardly-extending U-shaped parts that serve as convenient means with which to raise said first-named part from the board or the paper, when it is desired either to place paper on the board or to remove one or more sheets therefrom.

A vertical plate, strip, or abutment 7, rolled outwardly at the top to form a bead 8, is provided to fit into either slot 2, and a similar abutment 9, having a similar bead 10, is provided to fit into the slot 3. An angular rod or corner brace 11 connects the abutments 7 and 9 by having its ends inserted into adjacent terminals of the beads 8 and 10, such ends entering far enough so that said brace assists in making said abutments more stable and permitting slots (2 and 3) of less depth to be employed for the abutments. The abutments 7 and 9 are adjustable longitudinally in their slots 2 and

3, and may be lifted out of said slots altogether. The abutment 7 can be placed in either slot 2 desired, when the brace 11 is disconnected or detached, adjacent terminals of said abutment and the abutment 9 being afterward connected by said brace. Thus it is seen that the abutment 7 can be located at either end of the base 1, with the abutment 9 at either the right-hand or the left-hand side according to the position in which said base is held. The brace 11 is above the clip 4.

Since the abutments 7 and 9 are removable and the brace 11 is disconnectible, as previously observed, the parts must not fit so tightly as unduly to interfere with such removal and disconnection. The abutments should form a right-angle with each other, and in case of any slight inaccuracy that may occur, as determined by testing with a triangle, the brace 11 can be manipulated a trifle to correct or remove such inaccuracy.

By using the abutments 7 and 9 as guides for a triangle, the device thus far described can be employed for drafting or sketching purposes, but not so well or conveniently as when the parts and members described below are present.

Two guides 12 and 13, the faces of which are graduated to form scales, as represented at 14, are attached to the abutments 7 and 9, respectively, by means of flat strips or extensions 15 and 16 having at the top outwardly-directed rolls or sleeves 17 and 18, respectively. The upper edge of the guide 12 is slotted longitudinally at 19 to receive the base of the extension 15, and the upper edge of the guide 13 is similarly slotted at 20 to receive the base of the extension 16. The extension sleeve 17 fits the bead 8 and can slide and partially rotate on the same, while the extension sleeve 18 fits the bead 10 and can slide and partially rotate thereon.

Since the sleeves 17 and 18 are longitudinally movable on the beads 8 and 10, the guides 12 and 13 are longitudinally adjustable, which is a desirable factor because I am thus able to change the positions of the scales 14 in paths at right-angles to the graduation marks.

The guides 12 and 13 can be turned up to admit paper between them and the base 1, or permit paper to be removed from said base or the pad or block thereon, and turned down again onto the paper or base beneath, swinging on the beads 8 and 10, respectively, as axes. When swung down into operative and active positions, the bottom edges of the guides 12 and 13 in practice receive one or another of the edges of a triangle and firmly support and accurately guide said triangle, as it is used as a straight-edge and is moved on the paper. At the same time the aforesaid edges of said guides bear on the paper adjacent to two edges thereof, and so assist the clip 4 in holding said paper in place on the base 1, the fit between the sleeves 17 and 18 and their respective beads 8 and 10 being sufficiently snug to enable the guides thus to serve as a factor in securing the paper.

The paper is placed on the base 1, while the guides 12 and 13 are turned up, and one corner of such paper inserted beneath the clip 4, care being taken to thrust the paper against both abutments 7 and 9 while said clip is raised. The guides 12 and 13 are then turned down onto the paper. A plurality of sheets of paper is represented at 21, in Fig. 3.

The use of the flat extensions 15 and 16 and the presence of the slots 19 in the guides 12 and 13 enable me to change the scales, either by turning them over to expose different scales which may be on the other sides, or to substitute other guides having different scales thereon, without providing additional parts other than the differently marked guides themselves.

In the first view a triangle is represented by broken lines, at 22, as having its base in contact with the guide 12, and the same triangle is represented by dot-and-dash lines, at 23, as having its side in contact with the guide 13.

The manner of using this sketch board and of manipulating a triangle or triangles thereon will be well understood from the foregoing, so that no further explanation is here necessary. It is clear that the scales 14 take the place or preclude the need of an independent or separate scale or scales, and that a T-square not only would be superfluous, but unless very short could not be used.

In the event that the abutment 7 be changed into the other slot 2, and it be desired to change the clip 4 so that it will occupy the same relative position as before, it is necessary simply to detach the prongs 6 from their present location and drive them in at the new location. The clip can be changed back again with equal facility.

Various modifications and changes may be made in the shape, size, construction, and arrangement of some or all of the parts of the device as herein shown and described, without departing from the nature of my invention as set forth in the appended claims.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a sketch board comprising a base slotted in the upper face adjacent to two sides which are at right-angles to each other, and upstanding abutments adapted to support a pad of paper on two adjoining sides, which abutments are receivable at their bottom edges in the slots in said base, said abutments being shorter than said slots and longitudinally adjustable therein, and held in place by frictional contact between the bottom portions of said

abutments which are in said slots and the sides of the slots.

2. As a new article of manufacture, a sketch board comprising a slotted base, abutments receivable at the bottom in the slots in said base, and a corner brace connecting adjacent ends of said abutments, the latter being adjustable in said slots and on said base.

3. As a new article of manufacture, a sketch board comprising a slotted base, abutments receivable at the bottom in the slots in said base, and having beads at the top, and an angular brace engaging said beads.

4. As a new article of manufacture, a sketch board comprising a slotted base, angularly-arranged upstanding abutments which are receivable at the bottom and longitudinally adjustable in the slots in said base, said abutments being held in place by frictional contact with the sides of said slots, and being spaced apart at adjacent ends, and a paper clip mounted on said base in the space between said adjacent ends of said abutments.

5. As a new article of manufacture, a sketch board comprising a slotted base, angularly-arranged beaded abutments receivable at the bottom in the slots in said base, and spaced apart at adjacent ends, an angular brace engaging the abutment beads, and a paper clip mounted on said base under said brace in the space between said adjacent ends of said abutments.

6. As a new article of manufacture, a sketch board comprising a base provided with angularly-arranged abutments, and members movably mounted on said abutments, such members in cross-section being oblique to the working surface of said base, and serving as implement guides and holding means for paper on said base,

7. As a new article of manufacture, a sketch board comprising a base equipped with a paper clip, and with angularly-arranged abutments, and members movably mounted on said abutments, such members in cross-section being oblique to the working surface of said base, and serving as implement guides and additional holding means for paper on said base.

8. As a new article of manufacture, a sketch board comprising a base equipped with angularly-arranged vertical abutments, and oblique scale-provided implement-guide members supported at their upper edges from the upper edges of said abutments, and adapted to be swung at their bases toward and away from said abutments.

9. As a new article of manufacture, a sketch board comprising a base equipped with angularly-arranged vertical abutments, and oblique scale-provided implement-guide members movably mounted on said abutments and serving as overlapping holding means for paper on said base.

10. As a new article of manufacture, a sketch board comprising a base equipped with a paper clip, and with angularly-arranged vertical abutments, and oblique scale-provided implement-guide members movably mounted on said abutment and serving as additional and overlapping holding means for paper on said base.

11. In a sketch board, a base, a vertical abutment mounted on said base, and an oblique guide pivotally supported from said abutment, and adapted to have its bottom edge raised or lowered to accommodate itself to different thicknesses of paper on said base.

12. In a sketch board, a base, a beaded abutment mounted on said base, and a guide provided with an extension which is sleeved to the abutment bead, whereby the bottom edge of said guide may be raised or lowered to accommodate itself to different thicknesses of paper on said base.

13. In a sketch board, a base, a beaded abutment mounted on said base, a member sleeved to the abutment bead, and a guide attached to said member and removable therefrom.

14. The combination, in a sketch board, of a slotted base, abutments receivable in the slots in said base, and adapted to be arranged in angular relation to each other with a space between adjacent ends, a corner brace connecting such ends, a paper clip on said base in such space, and combined guide, scale and paper-holding members having extensions pivotally connected with said abutments.

RODNEY B. WARE.

Witnesses:
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ALFRED C. FAIRBANKS.