C. L. BARTHOLOMEW.

PORTABLE DRAWING BOARD.

APPLICATION FILED APR. 12, 1915.

1,207,702.

Patented Dec. 12, 1916.

3 SHEETS—SHEET 1.

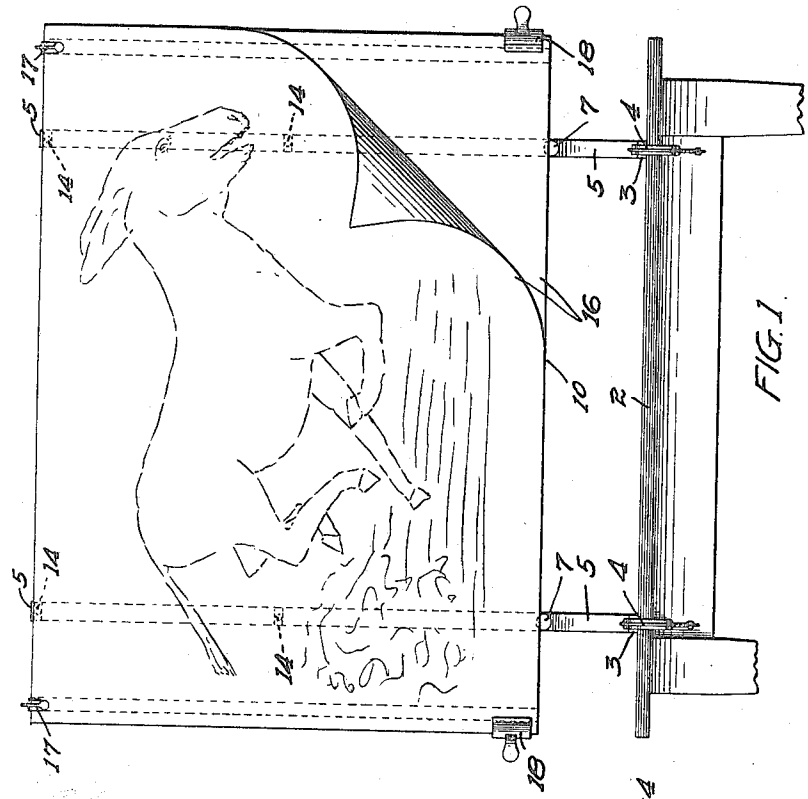


FIG. 1.

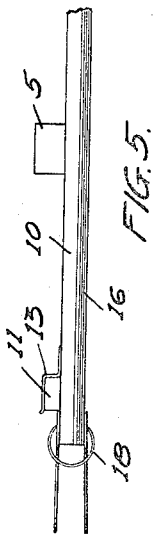


FIG. 5.

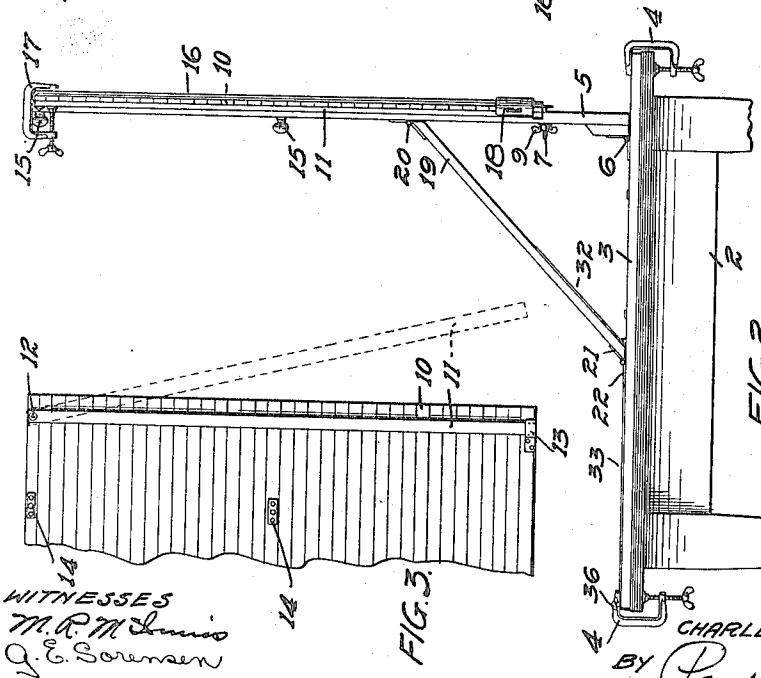


FIG. 2.

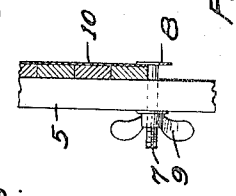


FIG. 4.

FIG. 3.

WITNESSES

M. R. M. Lewis

J. E. Sorensen

INVENTOR

CHARLES L. BARTHOLOMEW

BY Paul & Paul

ATTORNEYS

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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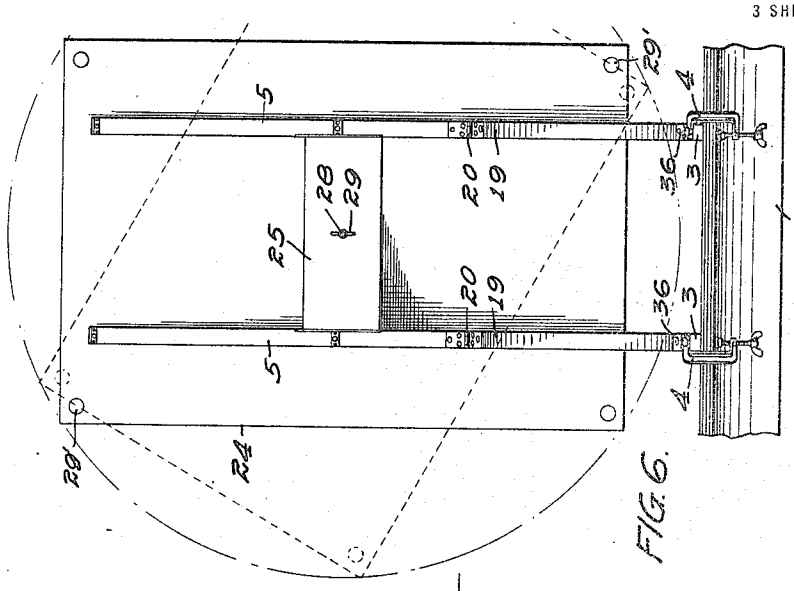


FIG. 6.

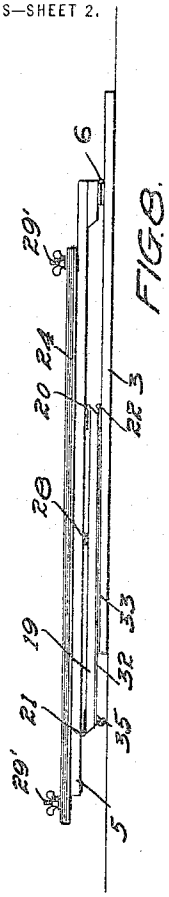


FIG. 8.

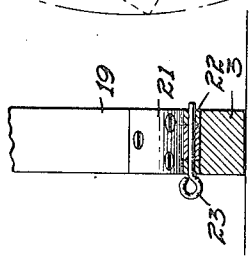


FIG. 11.

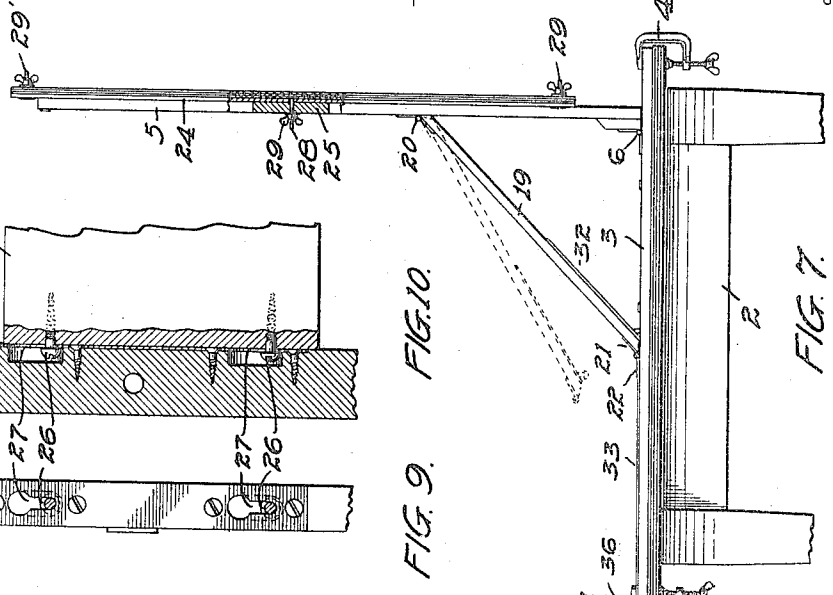


FIG. 7.

FIG. 10.

FIG. 9.

WITNESSES

M. C. McInnis

G. E. Sorensen

INVENTOR

CHARLES L. BARTHOLOMEW

BY Paul & Paul

ATTORNEYS

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3 SHEETS—SHEET 3.

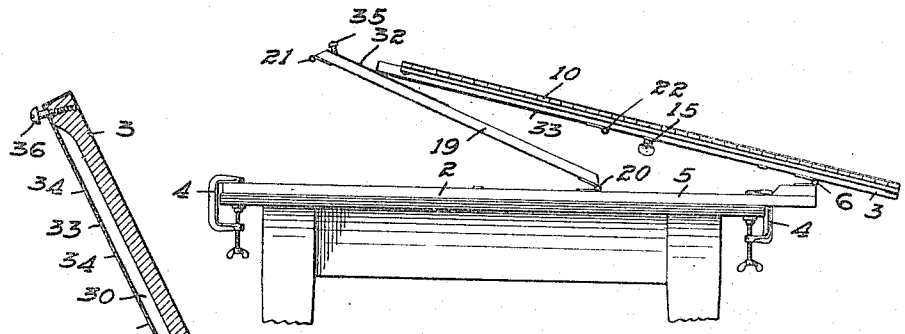


FIG. 12.

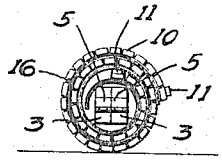


FIG. 17.

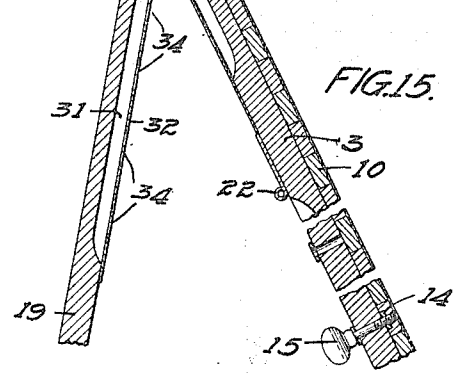


FIG. 15.

FIG. 13.

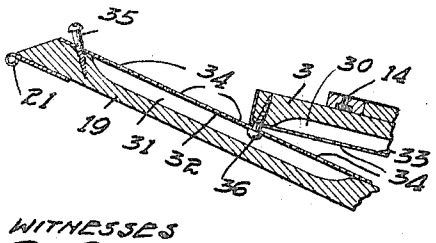


FIG. 14.



FIG. 16.

WITNESSES

M. R. McInnis

Q. E. Sorensen

INVENTOR

CHARLES L. BARTHOLOMEW

BY Paul & Paul

ATTORNEYS

THE NORRIS PETERS CO., PHOTO LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES L. BARTHOLOMEW, OF MINNEAPOLIS, MINNESOTA.

PORTABLE DRAWING-BOARD.

1,207,702. Specification of Letters Patent. Patented Dec. 12, 1916.

Application filed April 12, 1915. Serial No. 20,921.

To all whom it may concern:

Be it known that I, CHARLES L. BARTHOLOMEW, citizen of the United States, resident of Minneapolis, county of Hennepin, State of Minnesota, have invented certain new and useful Improvements in Portable Drawing-Boards, of which the following is a specification.

The object of my invention is to provide a drawing board adapted to be mounted in a vertical or upright position on a table for use as an easel in a chalk talk or lecture and capable of convenient and rapid adjustment to an inclined position for use in drafting.

A further object is to provide a chalk talk or lecture easel which can be folded into a compact form convenient for carrying from place to place.

The invention consists generally in various constructions and combinations, all as hereinafter described and particularly pointed out in the claims.

In the accompanying drawings forming part of this specification, Figure 1 is a front elevation of a board adapted for use in a lecture or chalk talk and embodying my invention, Fig. 2 is an end elevation of the same, Fig. 3 is a detail view of the board which I prefer to employ in chalk talk or lecture work on account of its construction which permits of rolling into a compact portable form, Fig. 4 is a detail sectional view illustrating the means for supporting the board on the upright arms af the brackets, Fig. 5 is a view, illustrating the bar for holding the flexible board in its unfolded or flattened position and also illustrating the means for fastening the sheets of paper to the board, Fig. 6 is a detail view, illustrating the rear of a board that is mounted to revolve in a vertical plane on its support, Fig. 7 is an end view, partially in section, of the same, Fig. 8 is a view of the device folded, the board being of rigid construction and non-folding, the supporting brackets being hinged and folded against the board, Figs. 9, 10 and 11 are detail views, illustrating the construction of the supporting brackets, Fig. 12 illustrates the adaptation of the invention to a draftsman's table or drawing board, Fig. 13 is a similar view, showing the board raised to a position that is nearly vertical to the plane of the table on which the device is mounted, Fig. 14 is a detail sectional view, showing the manner of connecting the bars of the drawing board with the supporting arms of the brackets, as shown in the general view of Fig. 12, Fig. 15 is an enlarged detail of Fig. 13, showing the connection between the board supporting bars and the brackets when the board is moved to a nearly upright position, Fig. 16 illustrates the board rolled to a compact form for carrying, Fig. 17 is an end view of Fig. 16, showing the board rolled and the brackets folded and inserted into the roll.

In the drawing, 2 represents a table of any suitable style, upon which my invention is mounted. This table has the usual flat top and bars 3 are spaced thereon in parallel relation to one another and secured to the table top at each end by suitable means, such as clamps 4. These clamps can be easily tightened or loosened in setting up the device on the table or removing it therefrom. Upright bars 5 are hinged to the bars 3 at 6, preferably near one end of the bars 3, so that the bars 5 or upright supports will be located near the front of the table. These horizontal and upright bars form the supporting brackets for the drawing board.

Near the lower ends of the upright bars I arrange supports for the board proper, or the member to which the sheets of paper are secured. These supports consist preferably of bolts 7 passing through the bars 5 and having heads 8 at one end and thumb nuts 9 fitting the opposite threaded ends of the bolts.

The board proper, which I will designate by reference numeral 10, consists of a series of narrow slats placed edge to edge and secured to one another by a flexible fabric, such as canvas, that is glued or otherwise secured to the flat faces of the slats on one side thereof, thereby holding the slats closely together in parallel relation and forming a support to which the paper sheets for drawing purposes may be attached by suitable means. These slats may, of course, be rolled up in compact form and to provide for a suitable rigidity of the board when in use I provide bars 11 pivoted at 12 at each end of the board to the outer slat and adapted to engage clips 13 provided on the outer slat on the other side of the board. These bars, when disengaged from the clips, can be swung to a position parallel with the slats composing the board and be rolled up in compact form with the slats. When the lower edge of the board is inserted between the heads 8 and the upright bars, it

will be securely held against outward movement.

Any other suitable device for holding this flexible board in its flattened form may be used. This type of board is designed particularly for chalk talks or lectures, the board being rolled up in convenient form to be carried under the arm and the folding brackets inserted into the opening in the center of the roll, thus making a convenient package for carrying from place to place.

Near the middle of the board at each end thereof I prefer to provide plates 14 having threaded sockets therein and at the top of the board I provide similar plates to receive bolts 15 that are mounted in the upright bars 5 near the middle and at the top thereof. These bolts have suitable heads or finger grips for convenience in screwing them in or out of the threaded sockets in the plates 14. When these bolts and the thumb screws 9 are tightened, the board 10 will be firmly clamped to the upright bars.

In setting up the board, a suitable number of paper sheets 16 are provided and secured at the top, preferably by clamps 17. At the bottom I prefer to provide clips 18 which allow either lower corner of the paper to be loosened and torn off at the top easily and rapidly, so that as fast as one drawing or sketch is made and the remarks completed, the lecturer can tear off the outer sheet, exposing the next one for a new drawing.

The board is supported in its upright position preferably by braces 19, hinged to the upright bars at 20 and having hinged sections 21 at their lower ends to interlock with sections 22 mounted on the horizontal bars 3, said sections having sockets therein which register with one another when the sections are placed together to receive locking pins 23. The drawing board will thus be firmly supported in an upright position.

In some instances I may prefer to provide a support for the drawing board which will allow it to be revolved or inverted and in that case I prefer to employ a rigid board 24 and between the upright bars 5 I arrange a plate 25 having headed pins 26 in the ends thereof to fit into key-hole slots 27 provided in the inner edges of the bars 5. When the pins 26 are inserted into these slots and drop down to the contracted portions thereof, the plate 25 will be supported and the bars 5 rigidly held in parallel relation with one another. In the middle of this plate 25 is a bolt 28 which passes through the center of the drawing board and has a thumb nut 29 thereon. When this thumb nut is loosened, the drawing board can be revolved completely or set at any desired angle on the supporting bars.

The paper is fastened to the board by means of bolts 29′ having thumb nuts thereon, the heads of the bolts being flattened to swing past the upright bars of the bracket when it is desired to revolve the board either partially or completely. (See Figs. 6 and 7.)

In Fig. 12 I have shown the device adapted for drafting purposes and I prefer to reverse the position of the bars 3 and 5, the latter being laid flat upon the table and clamped thereon, while the former are raised to a suitable inclined position and constitute a rest for the drawing board. These bars 3 and 5 have longitudinal recesses 30 and 31 therein, over which plates 32 and 33 are secured. These plates are provided with key-hole slots 34, as shown in Fig. 9, to receive headed pins 35 and 36. The pins 35 enter the slots in the plates 33 when it is desired to support the board at the angle indicated in Figs. 13 and 15, or substantially sixty degrees, the board being supported by the bolts 15 and by having mountings for these bolts at intervals in the bars 3 I am able to adjust the drawing board vertically thereon, arranging it with its lower edge flush with the lower ends of the bars, as indicated in Fig. 12, or to depend a considerable distance below them, as indicated in Fig. 13. If it is desired to swing the board down to a position nearly horizontal, the headed pins 36 are engaged with the key-hole slots in the plates 32, as shown in Fig. 12, and thereupon the board will be held at the desired angle for the draftsman's use.

The same supports may be used for the drawing board in all instances, it being merely necessary or desirable to reverse the position of the bars. When the board has been removed, the supporting brackets can be folded into a compact form and inserted into the roll for convenience in carrying the device from place to place.

I claim as my invention:

1. A drawing apparatus comprising brackets composed of pairs of bars, the bars of one pair having one end pivotally connected to the bars of the other pair at a point intermediate to their ends, and means for securing the bars of either pair to a horizontal support, braces interposed between the corresponding bars of the pairs for supporting one pair of bars in an inclined position for drawing purposes, or an upright position for lecture work, and means for fastening a drawing board to either of the pairs of bars.

2. A drawing apparatus comprising brackets composed of upright and horizontal members having means for securing either one of them to a horizontal support, each member of a bracket having a hinged connection at one end with the corresponding member of the other bracket at a point intermediate to its ends, said brackets being

capable of inversion to reverse the position of said members and a drawing board having means for securing it to either one of said members, the securing means of said board on one of said members permitting the revolution of said board in the plane thereof.

3. A drawing apparatus comprising brackets composed of upright and horizontal members mounted for adjustment toward or from one another and having means for securing them to a support, said members being arranged in pairs, one member of each pair being hinged at one end to the other member of the same pair at a point intermediate to its ends, and said members being reversible, and a drawing board having means for securing it to either member of a pair.

4. A drawing apparatus comprising brackets composed of upright and horizontal members having means for securing either one of them to a horizontal support, each member of a bracket having a hinged connection at one end with the corresponding member of the other bracket at a point intermediate to its ends, said brackets being capable of inversion to reverse the position of said members and a drawing board having means for securing it to either one of said members.

5. A drawing apparatus comprising brackets composed of bars, those of one bracket being pivotally connected with the corresponding bars of the other bracket, braces adjustably mounted between the corresponding bars of said brackets, and means for horizontally securing the bars of one bracket to a support, the other bracket having freedom of vertical adjustment to adapt it as an inclined support for a drawing board, and said brackets being capable of reversal on said support and when reversed the formerly horizontal bracket then forming a vertical support for a lecture board, said braces having means for holding said vertical support in an upright position.

In witness whereof, I have hereunto set my hand this 2d day of April, 1915.

CHARLES L. BARTHOLOMEW.

Witnesses:
GENEVIEVE E. SORENSEN,
EDWARD A. PAUL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."