

Feb. 7, 1928.

1,658,683

A. P. JACOB

STRAIGHTEDGE

Filed Oct. 10, 1924

Fig. 1.

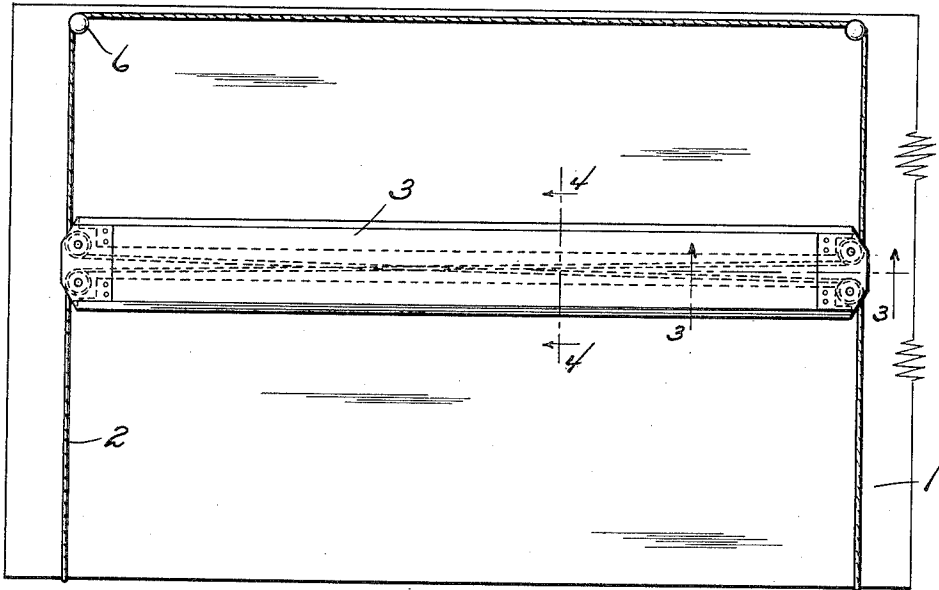


Fig. 3.

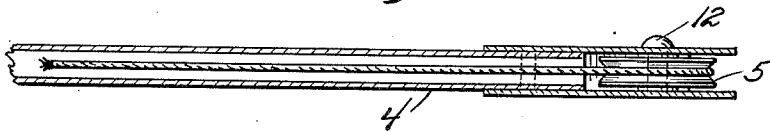
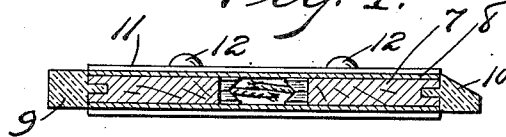


Fig. 2.



Fig. 4.



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UNITED STATES PATENT OFFICE.

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STRAIGHTEDGE.

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This invention relates to a straight edge and has particular reference to a straight edge for use in connection with drawing boards.

The principal object of the invention is to provide a straight edge wherein the cable and pulleys employed in devices of this nature, are concealed within the body to prevent the cable from interfering with its operations, and which also prevents any liability of the cable from slipping off the pulleys, which is a serious objection in the straight edges heretofore constructed, and which further prevents the sagging of the cable on the surface of the drawing, causing obliteration of the lines as occurs in straight edges where the cable passes along a groove or opening on its underside instead of passing through a conduit enclosed on all sides and which is the main feature of the present invention.

Another object of my present invention is the provision of a straight edge for use in connection with a cable for facilitating the drawing of parallel straight lines on large work; the said straight edge being characterized by the capacity to receive and completely enclose portions of the cable whereby the straight edge may be moved or manipulated without interference from the cable or any portion thereof.

To the attainment of the foregoing, the invention consists in the improvement as hereinafter described and definitely claimed.

In the accompanying drawings, forming part of this specification:—

Figure 1 is a plan view showing my novel straight edge as properly arranged relative to a drawing board and a cable associated with the board.

Figure 2 is an enlarged elevation showing one end of the straight edge and cable portions adjacent thereto.

Figure 3 is a longitudinal central section taken in the plane indicated by the line 3—3 of Figure 1.

Figure 4 is an enlarged cross-section taken in the plane indicated by the line 4—4 of Figure 1.

Similar numerals of reference designate corresponding parts in all of the views of the drawings.

I show in Figure 1 a drawing board 1 together with a cable 2 and my novel straight edge 3 which is characterized by an enclosed longitudinal central conduit 4 for the pas-

sage and crossing of the cable and is also characterized by the employment at its ends and at opposite sides of the said conduit 4 with circumferentially grooved pulleys 5. As illustrated the cable 2 is connected at its ends to the drawing board 1 and is looped over guides 6 on the drawing board and is passed over the sheaves 5 and through the conduit 4 in the relation shown by full and dotted lines in Figure 1 and by full lines in Figures 2 and 3.

Manifestly by the manipulation of the straight edge 3 constructed and arranged as described parallel straight lines may be made on large work with great facility; and it will be appreciated that by virtue of the cable being extended through the conduit 4 of the straight edge 3, the cable offers no projection on the surface of straight edge 3, and therefore the said straight edge 3 may be conveniently handled and moved without any liability of interference from the cable.

My novel straight edge 3 is preferably constructed in the manner shown in Figures 2, 3 and 4—i. e., the said straight edge comprises spaced longitudinal and parallel sections 7 of wood between the opposed longitudinal edges of which the before mentioned conduit 4 is formed, comparatively thin layers 8, of metal or preferably of red fiber, adhesively secured to opposite sides of the sections 7 and forming the upper and lower walls of the conduit 4, edge portions 9 and 10, preferably of celluloid opposed and connected by appropriate means to the outer longitudinal edges of the sections 7, thin end plates 11 of metal, and rivets 12 extending through and connecting the sections 7, layers 8 and plates 11. It will also be observed that the sections 7 and the layers 8 are recessed at the ends of the straight edge for the housing of the sheaves 5.

In the use of my novel straight edge the cable 2 is arranged as shown in Figure 1, and in this connection it will be noted that the conduit 4 lends itself to the crossing of the portions of the cable 2 within the straight edge 3 without the said cable portions interfering with the lateral adjustment of the straight edge 3.

Notwithstanding the practical advantages ascribed to my novel straight edge, it will be manifest that the straight edge is simple and inexpensive in construction and is well adapted to withstand the usage to which

devices of this character are ordinarily subjected.

I have specifically described the construction embraced in the preferred embodiment of my invention in order to impart an exact understanding of said construction. I do not desire, however, to be understood as confining myself to the structure disclosed inasmuch as my invention is defined by my claim within the scope of which changes in structure may be made without departure from my invention.

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

A straight edge comprising longitudinal

spaced sections, comparatively thin layers secured to the respective sides of and spacing said sections and cooperating with the same in forming a longitudinal conduit through the straight edge, said sections being recessed at their ends, thin plates arranged at the outer sides of the respective ends of said thin layers, means connecting the sections, layers and plates, and sheaves mounted between the thin plates and disposed in the respective recesses and defining the ends of the said conduit.

In testimony whereof I hereby affix my signature.

ALFRED PETER JACOB.