

(No Model.)

F. WEBER.  
DRAWING BOARD.

No. 312,535.

Patented Feb. 17, 1885.

Fig. 1.

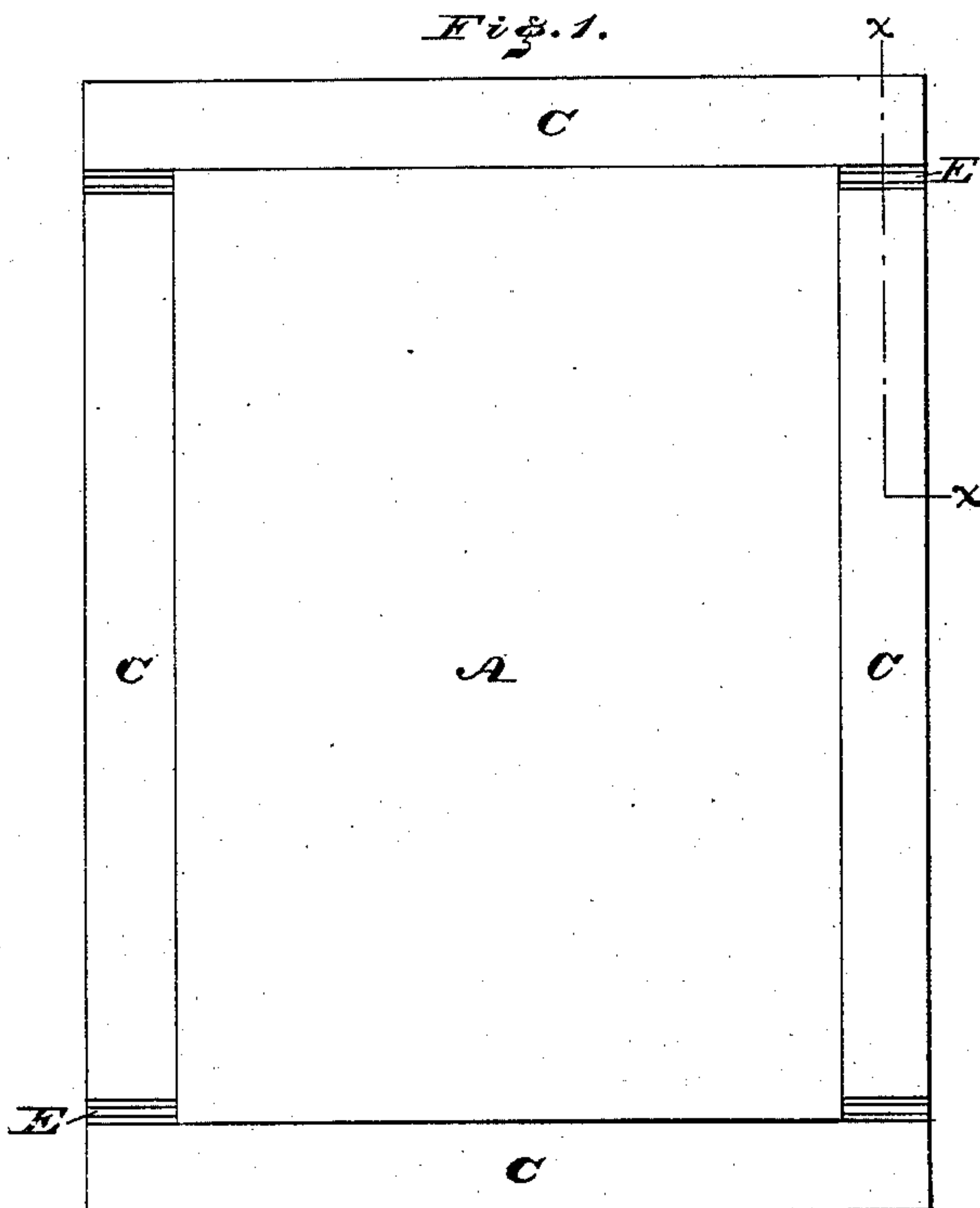
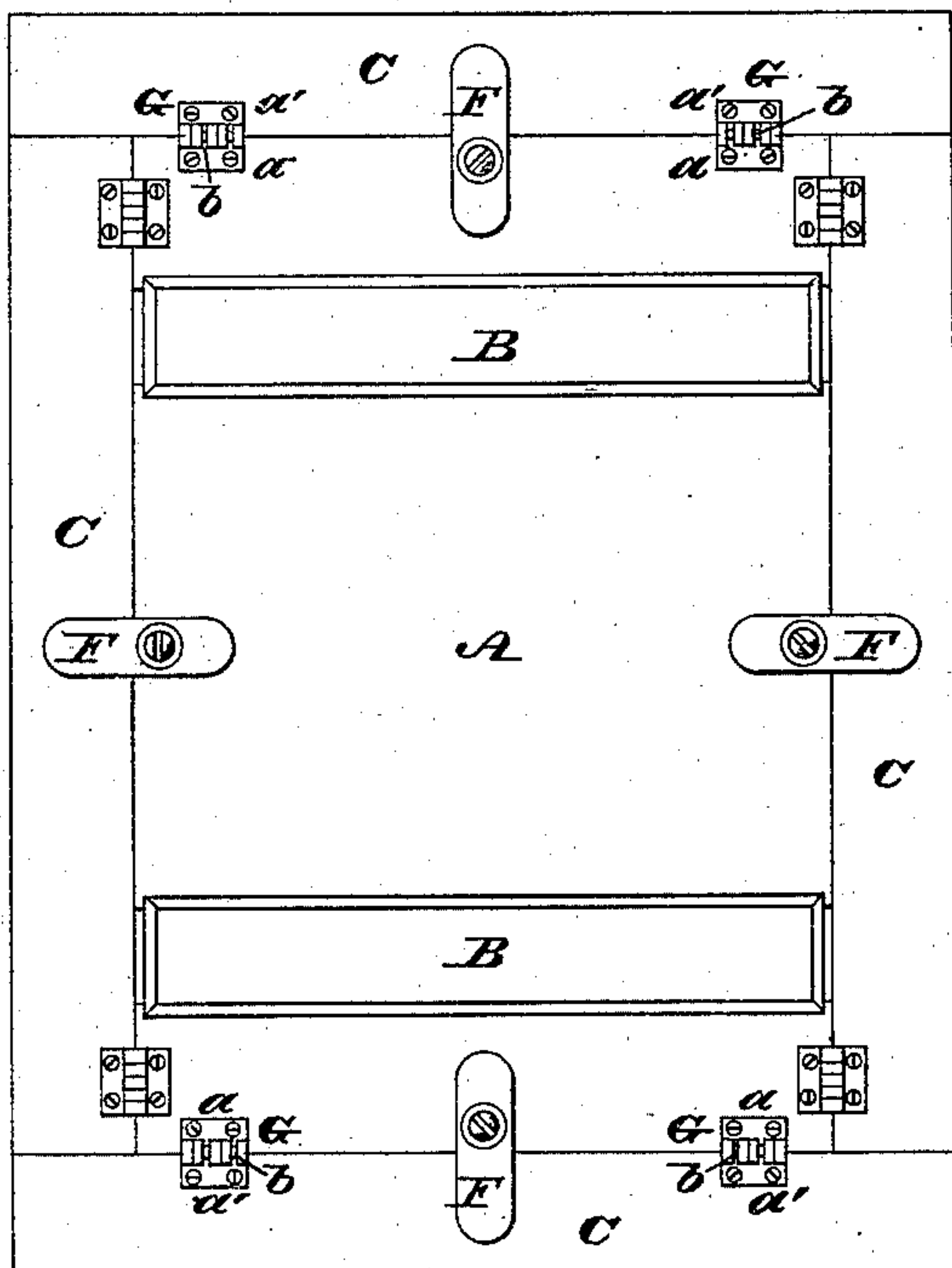


Fig. 2.



WITNESSES:

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Fig. 3.

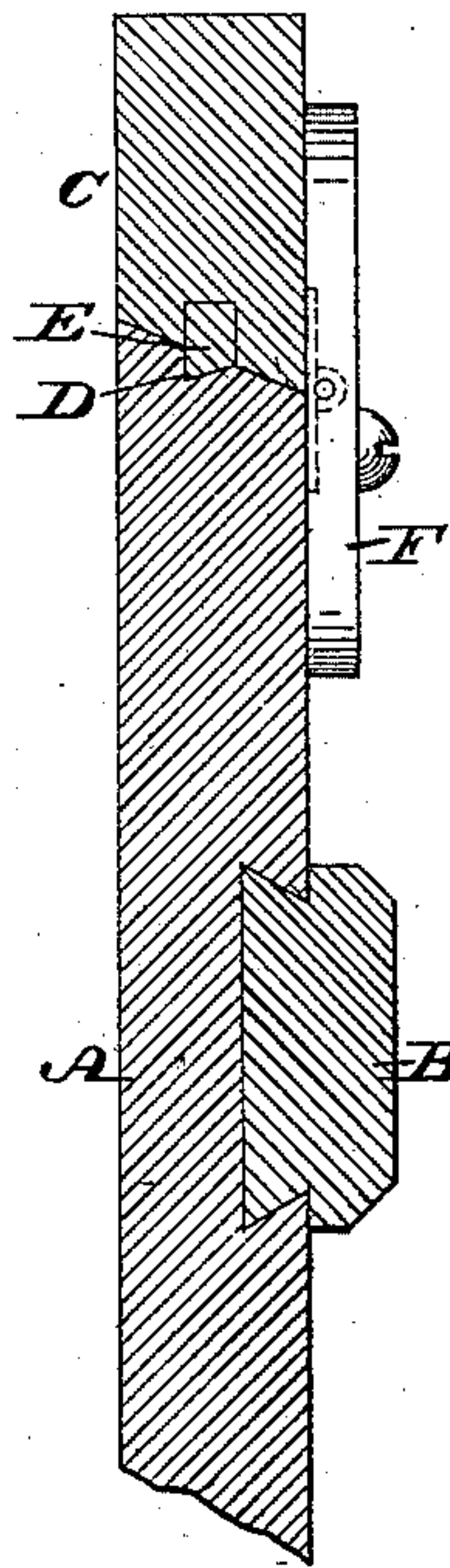
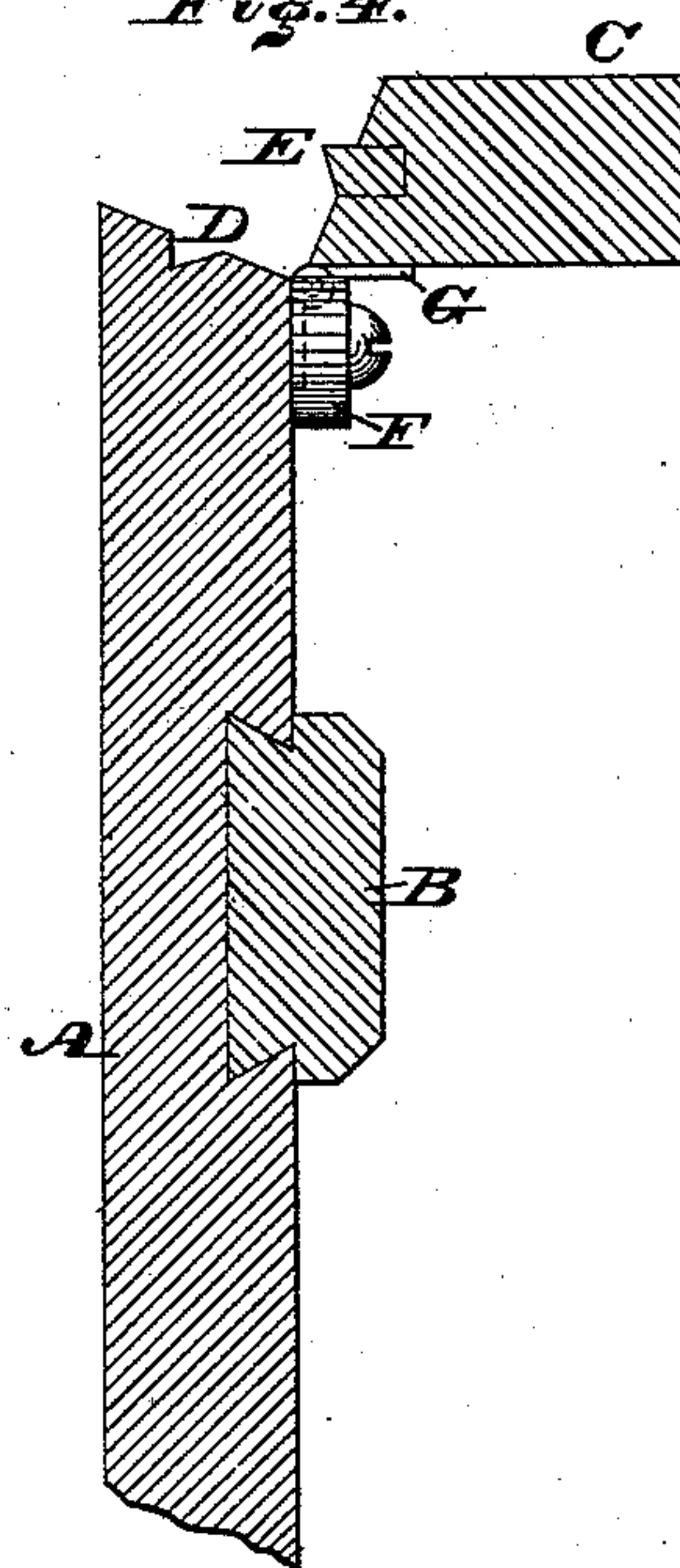


Fig. 4.



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# UNITED STATES PATENT OFFICE.

FREDERICK WEBER, OF PHILADELPHIA, PENNSYLVANIA.

## DRAWING-BOARD.

SPECIFICATION forming part of Letters Patent No. 312,535, dated February 17, 1885.

Application filed October 1, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK WEBER, of the city and county of Philadelphia, State of Pennsylvania, a subject of Prussia, (having resided one year last past in the United States and made oath of intention to become a citizen thereof,) have invented a new and useful Improvement in Drawing-Boards, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a face view of a drawing-board embodying my invention. Fig. 2 represents a rear view thereof. Figs. 3 and 4 represent a section of a portion thereof, enlarged, in line *x x*, Fig. 1, the side or top bar of the board being shown open in Fig. 4.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a drawing-board having bars hinged to the sides thereof, the contiguous faces of the board and bars being provided with means for tightening and firmly holding the paper on the board.

It further consists of the construction of the hinges which connect the side bars with the board, whereby, should the board contract or shrink, the butts of the hinges are permitted to move, thus preventing warping of the adjacent parts or loosening of the hinges.

Referring to the drawings, A represents a drawing-board, formed of suitable wood, and having on the back the battens or braces B, for strengthening purposes, which, however, form no part of the present invention.

CCCC represent bars which are hinged to the sides of the board A, and adapted to move rearward thereof, it being noticed that the bars of opposite sides are of equal lengths, so that the bars shown on the right and left sides may turn backward or rearward between those of the top and bottom; but the arrangement may be reversed—that is to say, the top and bottom bars may be made shorter and the right and left side bars longer, so that the former may turn or fold backward within the latter. In the side edges of the board are grooves D, and on the inner edges of the bars are tongues E, which are so located that when the bars are closed they enter said grooves, said tongues and grooves being V-shaped or

pointed, for purposes to be hereinafter explained. To the back of the board are pivoted the fastening buttons or fingers F, for holding the bars C immovable.

When it is required to fit the drawing-paper or other material to the board, the buttons F are turned so as to release the bars C, and the latter are then turned back. The paper is then placed on the board and its ends or sides bent over the edges of the board, thus covering the grooves D. The bars are now restored to their normal position, whereby the tongues E bear against the portion of the paper over the grooves and press the same into said grooves, thus gradually and easily drawing up the paper and causing it to be stretched taut and uniform on the board, it being noticed that the V shape of the tongues and grooves causes the paper to be tightened by a wedging action without liability to be cut or torn by the tongues. The bars are firmly retained in their closed positions by the buttons F, and thus the security of the paper on the board is assured. When the paper is to be removed, the buttons are properly turned, and the bars are then swung rearward, thus relieving the paper of the holding action of the bars and permitting the entire withdrawal of the same from the board. It is evident that the tongues E may be formed on the sides of the board and the grooves D in the bars without affecting the nature of the case. The hinges G, which connect the top and bottom bars with the board, have the knuckles of the butts *a*, which are screwed to the board, cut away, as at *b*, so that spaces exist between said knuckles and the knuckles of the other butts, *a'*, which latter are screwed to said top and bottom bars.

Referring to Fig. 2, it will be seen that, should the board shrink, the butts *a* are drawn by the wood laterally toward the center of the board, this being permitted by the spaces *b*, and thus the hinges do not resist the shrinking of the board, so that warping of the latter, especially at their edges, and tearing out of the screws of the hinges are prevented.

The tongues and grooves E D may be rounded or right angular, instead of the pointed form shown, and the tongues may be made of strips inserted in the board or bars, or be in-



tegral with the board or bars, in either case acting as stiffeners which increase the strength of the board or bars.

An artist's frame may be employed in lieu of the board A for stretching and holding canvas, a picture, &c., the frame having bars hinged thereto, and the bars and frame being tongued and grooved, the operation being similar to that when the board A is employed.

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

1. A drawing-board having bars hinged to the sides thereof, so as to fold to the rearward, 15 and of such length that when raised they form a continuation of each other and coincide with the several sides of the board, substantially as and for the purpose set forth.

2. A drawing-board having bars hinged to 20 the sides and forming an extension thereof, the contiguous parts of the board and bars having tongues and grooves, whereby, when

the paper is fitted to the board, the portion of the same over the sides thereof is forced by the tongues into the grooves, and the paper is 25 thereby stretched, substantially as and for the purpose set forth.

3. A drawing-board having bars connected with the sides thereof by means of hinges, the butts whereof having their knuckles cut away, 30 as stated, so as to permit the board to shrink without being resisted by the hinges, substantially as set forth.

4. The board A, having grooves D and pivoted buttons F, in combination with side bars, 35 G, connected to said board by hinges and forming an extension thereof, the said hinges having the knuckles of one of the butts cut away, substantially as and for the purpose set forth.

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Witnesses:

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