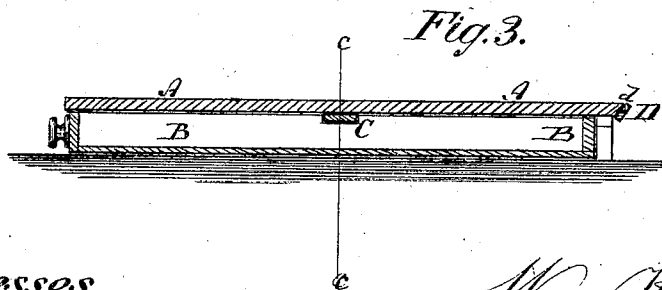
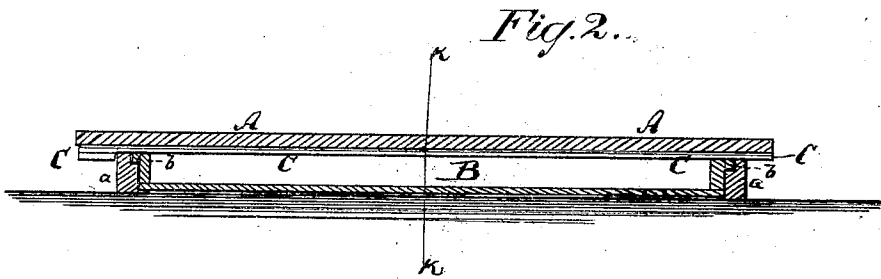
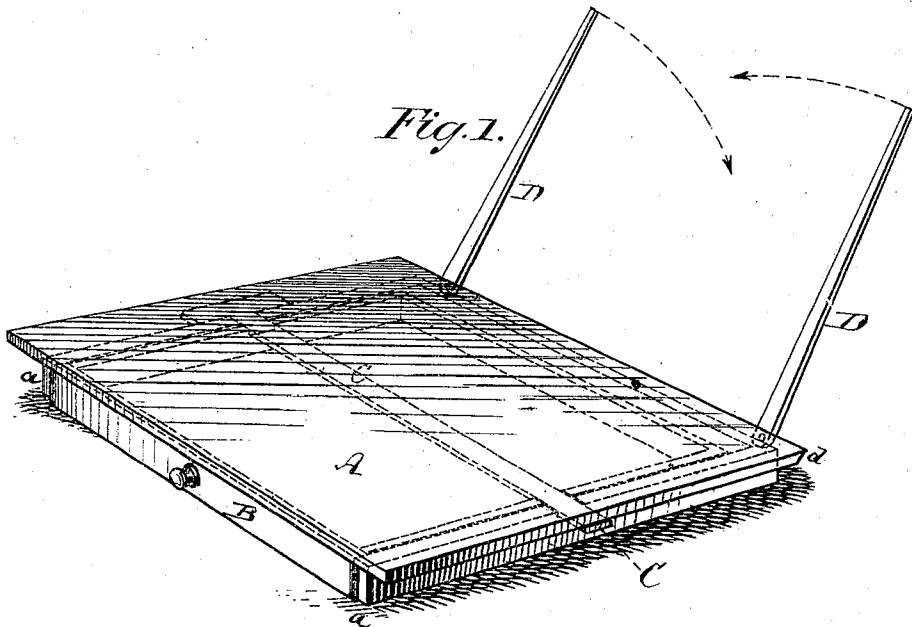


W. KEUFFEL & H. ESSER.

Drawing Boards.

No. 138,896.

Patented May 13, 1873.



Witnesses
John Becker
Fried Haynes

W. Keuffel
Hermann Esser
per Walter Brown & Allen
Attorneys

UNITED STATES PATENT OFFICE.

WILHELM KEUFFEL AND HERMANN ESSER, OF HOBOKEN, NEW JERSEY.

IMPROVEMENT IN DRAWING-BOARDS.

Specification forming part of Letters Patent No. **138,896**, dated May 13, 1873; application filed February 5, 1873.

To all whom it may concern:

Be it known that we, WILHELM KEUFFEL and HERMANN ESSER, both of Hoboken, in the county of Hudson and State of New Jersey, have jointly invented an Improved Student's Drawing-Board, of which the following is a specification:

Figure 1 is a perspective view of our improved student's drawing-board. Fig. 2 is a vertical transverse section of the same on the line C C, Fig. 3, and Fig. 3 is a longitudinal section of the same on the line, *k k*, Fig. 3.

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

This invention has for its object so to construct a drawing-board, more especially for the use of students and pupils, that the same will constitute a receptacle for all the appurtenances of a draftsman, thus relieving the latter from the necessity of carrying a multitude of boxes and tools, &c., in his pockets and hands in going to and coming from school or place of occupation. Our invention consists in notching or perforating the ribs on the under side of the drawing-board and in notching the upper edge of the drawer fitted between said ribs, so that thereby the said parts will be arranged for the reception of a T-square, which, when pushed through the perforated ribs will lock into the notches of said drawer and hold the same closed, preventing it from falling out while being carried. Our invention further consists in beveling the back edge of the board, and in pivoting thereto a pair of rods which can be swung up to constitute supports for the copy from which the drawing is to be made. The drawer may be provided with suitable partitions to receive the box of instruments, of colors, the pencils, rubber, ink, slabs, &c., in distinct compartments, and hold them properly separated. By this means, therefore, the desired object will be fully attained and a compact set of instruments, containing all that a draftsman may require, produced.

In the accompanying drawing, the letter A represents a drawing-board of suitable size and material, provided on its under side with

ribs *a a* in the customary manner. B is a drawer nearly as large in area as the board itself, and placed between the ribs *a a*, and supported thereon by outwardly-projecting tenons *b*, entering grooves in the inner sides of the ribs *a*, as is clearly shown in Fig. 2. C is the T-square, as long, about, as the board. For its reception the ribs *a a* are partly cut away directly under the board, or perforated, and the sides of the drawer are also notched or perforated so that when the T-square is pushed through these notches or perforations, in manner shown in Figs. 1 and 3, it will not only be concealed beneath the drawing-board and entirely out of the way, but will also serve as a lock for preventing the drawer from falling open.

The back edge of the drawing-board is by preference, but not necessarily, beveled, as is clearly shown at *d*, in Figs. 1 and 3. To this back edge are pivoted two bars or rods, D D, which can be folded against the edge when not to be used or while the board is being carried, and which, when to be used, are swung up in manner shown in Fig. 1, to support the copy or other thing to be drawn. These rods or bars D may, however, be dispensed with in many cases, and we do not confine the use of our other improvements to the connection with the same.

Claims.

1. The ribs *a* and drawer B, when notched or perforated to receive the T-square, as set forth.
2. The T-square combined with a drawing-board, A, and drawer B, to hold the latter closed, substantially in the manner described.
3. In combination with the drawing-board A, the pivoted rods or bars D D, applied to the back-edge of said drawing-board, substantially as and for the purposes described.

W. KEUFFEL.
HERMANN ESSER.

Witnesses:

A. V. BRIESEN,
MICHAEL RYAN.