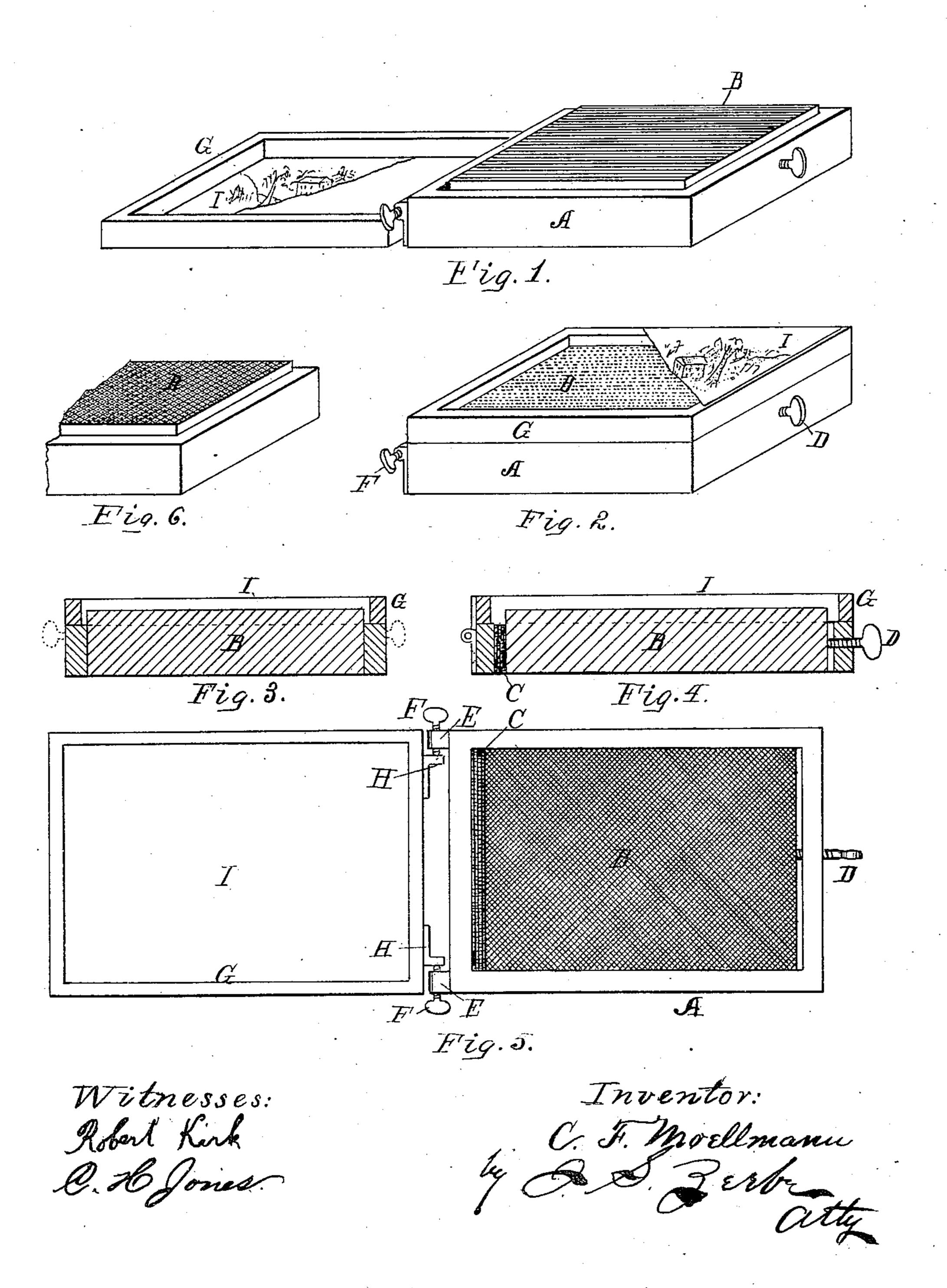
(No Model.)

## C. F. MOELLMANN.

DEVICE FOR TINTING AND SHADING SKETCHES AND DRAWINGS.

No. 304,221. Patented Aug. 26, 1884.



## United States Patent Office.

CHARLES F. MOELLMANN, OF CINCINNATI, OHIO.

DEVICE FOR TINTING AND SHADING SKETCHES AND DRAWINGS.

SPECIFICATION forming part of Letters Patent No. 304,221, dated August 26, 1884.

Application filed July 26, 1882. (No model.)

To all whom it may concern:

Be it known that I, Charles F. Moell-Mann, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Devices for Tinting and Shading Sketches and Drawings, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a perspective view of the open frame for sketching, tinting, or drawing purposes. Fig. 2 is a perspective view of the same closed. Fig. 3 is a cross vertical sectional view of same. Fig. 4 is a longitudinal sectional view of same. Fig. 5 is a top view showing the frame open, and Fig. 6 is a view of one of the relief-plates.

The object of my invention is to provide a frame for sketching, tinting, or drawing designs for photolithograph, zincograph or lithographic work, whereby the work may be quickly accomplished in a convenient manner

and with the best results.

To this end I provide a frame, A, preferably 25 rectangular in form, having sides somewhat shallower or lower than the height of the relief-plate B, which is placed within said frame. The relief-plate B may be ruled, stippled, or diagonally lined, as shown, or have any form 30 or design on the face, such as may be desired to shade or tint drawings or sketches. The block containing this relief-plate may be of the same size as the interior of the frame sidewise; but it should be smaller longitudinally, 35 so as to permit a rubber or elastic cushion, C, to be placed between the block B and the end of the frame. At the opposite end of the frame is a thumb-screw, D, which passes horizontally through the frame and rests against 40 the block B. This serves to hold the block B tightly in position against the cushion C at the opposite end. When it is desired to move the block B endwise a trifle, the thumb-screw D is turned so that the cushion will be more 45 tightly compressed, as will hereinafter be fully shown. One end of the frame A has two ears, E, each having thumb-screws F horizontally, which project inwardly. These screws have conical ends, as shown. A frame, G, prefer-50 ably the same size exteriorly as the frame A, is also provided at one end with ears H, which

project outwardly at points between the location of the ears, so that the conical-pointed thumb-screws F rest in suitable sockets in the outer faces of the ears H. The frame G is 55 therefore hinged to the frame A by the thumb-screws F; and it will be observed that provision is made for laterally moving the frame G within the limits of the ears E. Thus, while the block B is capable of being moved endwise, 60 the tympan moves sidewise. It will also be observed that the pivots of the hinges are so located that when the tympan G is opened and laid down flat the paper I stretched thereon rests flat on the table on which the frame A lies. 65

An apparatus thus constructed is ready to carry out the shading process, which will now be set forth.

The sketch to be tinted or shaded is first outlined on the inner surface of the paper I, 70 which is stretched on the outer surface of the frame G, as shown by portion of sketch in Fig. 1. When the outline is completed and the shading is necessary, a block, B, having a relief-plate of suitable design, is placed within the frame A 75 and inked, after which the frame or tympan G is turned over upon the frame A. Thus the paper I rests over the block B containing the reliefplate, but does not touch the said relief-plate, since sides of the frame G are thicker than the 80 projection of the relief-plate above the frame A. A folder is then employed to force the paper having the sketch down, and press it on the relief-plate, causing the relief-plate to leave its impression on the design at such 85 points as are designed. I prefer to have a piece of carbon paper, or like prepared paper, under the paper I when the outline is being made thereon, so that the carbon will impart the outline sketched to the other side of the 90 paper, to be subsequently used to shade by when the tympan is turned down, as shown in Fig. 2. This is, however, not essential in all cases. The operator, having gone over the drawing and shaded the same, can give the screw Da 95 slight turn, thereby moving the relief plate or block B a shade endwise, when the folder can be again passed over such portions of the drawing as require heavier lines or darker shading. In like manner the thumb-screws 100 F may be turned so as to move the tympan to one side, and thereby still more strengthen

the lines or heavily-shaded surfaces. By this means the operator can quickly produce the desired effect. The paper I being slightly elevated above the relief plate or block B when 5 the tympan rests on the frame A, it is obvious that no part of the paper will touch the reliefplate, except that part directly pressed down by the folder, thus insuring perfect work. The relief-plate, being elevated slightly above the 10 upper face of the frame A, can be inked with a roller without touching the frame.

I am aware that heretofore a device has been used to adjust the printing medium longitudinally or transversely, and do not broad-

15 ly claim such as my invention.

What I claim as new is--

A frame, A, having therein the relief-plate B, provided with adjusting-screw D and rubber cushion C, and the tympan G, hinged to frame A, and having adjusting-screws F, sub- 20 stantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 5th day of

July, 1882, in the presence of witnesses.

## CHARLES F. MOELLMANN.

Witnesses:

J. S. Zerbe,

O. J. BAILEY.