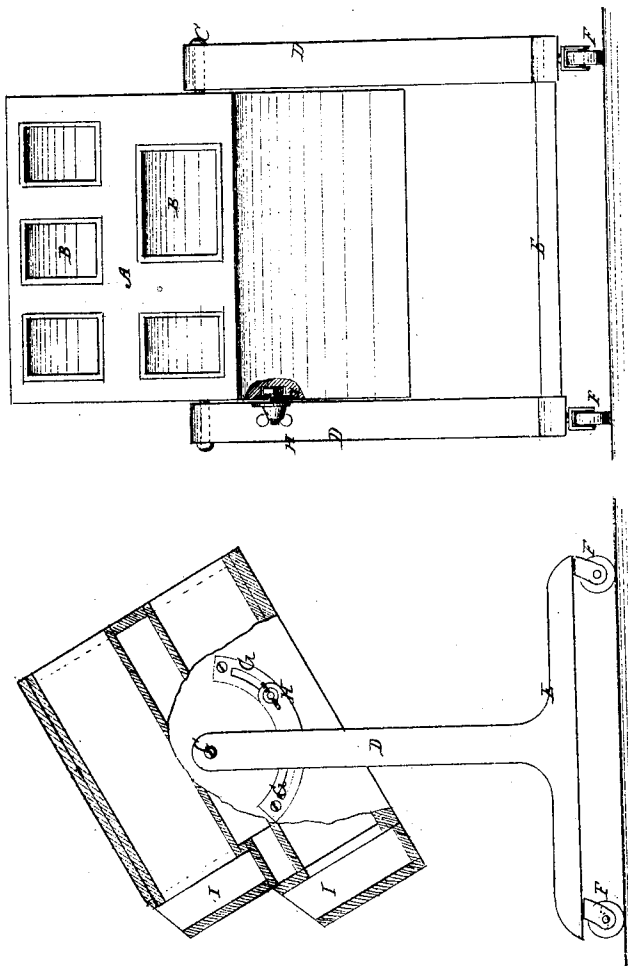


J. H. Hamilton,

Photograph Printing Apparatus.

No. 101728.

Patented Apr. 12. 1870.



Witnesses:

Chas. Nida
S. S. Mabree

PER

Inventor:
Jas. H. Hamilton
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United States Patent Office.

JAMES H. HAMILTON, OF SIOUX CITY, IOWA.

Letters Patent No. 101,728, dated April 12, 1870.

IMPROVEMENT IN PHOTOGRAPHIC PRINTING APPARATUS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JAMES H. HAMILTON, of Sioux City, in the county of Woodbury and State of Iowa, have invented a new and useful Improvement in Photographic Printing Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification.

This invention relates to improvements in apparatus for making mezzotint photographs, and consists in the employment of a large box containing several square tubes, and supported on pivots in a frame mounted on casters, so that it may be adjusted in vertical and horizontal planes, to cause the tubes to receive the rays of light from the sun in the lines of their axes at all times, and so as to fall on the negative perpendicular to it, the negative with the printing-frame being placed at the bottom of the tubes.

Figure 1 is a front elevation of my improved apparatus, and

Figure 2 is a sectional elevation of the same.

Similar letters of reference indicate corresponding parts.

A is the box containing the square tubes B, and mounted on pivots C in the upper ends of the parts D, which rise up from a stand, E, mounted on three or more casters, F.

G represents curved slotted projecting plates, placed in the sides of the box for securing it at any point of rotation on its horizontal axis by the screw and thumb-nut H.

I represents pockets at the bottom of the tubes, in which the printing-board is placed.

It will be seen that by turning the box on its axis,

and the stand on the casters, the light may be always caused to fall upon the negatives perpendicular to their planes.

These tubes, which are the size of the negatives, cut off all reflected or diffused light, and, by reversing the negative, or placing a glass between it and paper, a beautiful effect is produced, without impairing the definition.

Besides ordinary work, it is valuable for printing porcelain pictures, which, owing to inequalities in the surfaces of the negatives and porcelain plates, makes it almost impossible with the ordinary method of printing to produce a sharp picture, the contact being imperfect. With this apparatus this difficulty is removed.

In copying photographs, the roughness of the paper which produces such a disagreeable effect in the ordinary method of printing is removed, and the copy has all the smoothness and roundness of a picture taken from life, and in landscape photography many beautiful effects can be produced, not attainable in any other way.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

A photographic printing-case, A, provided with the tubes B and pockets I, and mounted on a stand, so as to oscillate vertically and horizontally, as herein shown and described.

The above specification of my invention signed by me this 14th day of February, 1870.

JAMES H. HAMILTON.

Witnesses:

A. F. WILGOSKI,
CHAS. GANDENBERGER.