

L. D. JUDKINS.

APPARATUS FOR VIGNETTING PHOTOGRAPHS.

No. 180,136.

Patented July 25, 1876.

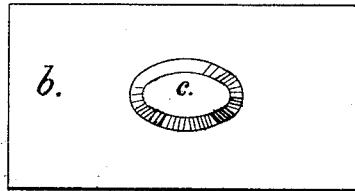
Fig. 1.



Fig. 2.



Fig. 3.



Witnesses;

H. P. Hood.
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UNITED STATES PATENT OFFICE.

LORENZO D. JUDKINS, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN APPARATUS FOR VIGNETTING PHOTOGRAPHS.

Specification forming part of Letters Patent No. **180,136**, dated July 25, 1876; application filed March 24, 1875.

To all whom it may concern:

Be it known that I, LORENZO D. JUDKINS, of the city of Indianapolis, State of Indiana, have invented an Improvement in Apparatus for Tinting Photographs, of which the following is a specification:

My invention consists in the employment and arrangement, in a photographic-printing frame, of two transparent or semi-transparent plates, having a space between them, in combination with an opaque body protecting portions of the picture, for the purpose of tinting or producing shaded effects around the figure, as hereinafter more fully described.

The accompanying drawings illustrate my invention.

Figure 1 represents a sectional elevation of a printing-frame, A, constructed like an ordinary photographic-printing frame, except that it is somewhat deeper, and the upper side is provided with a recess or rabbet, *a*, into which fits loosely a plate, *b*, of plain or ground glass, or other transparent or semi-transparent substance. To the under side of this plate is fastened, in any suitable manner, an opaque body, *c*, which is preferably round or oval in outline; its thickness is immaterial. It may be made thick enough to fill the space between the plates *b* and *d*, or any other less thickness desired, the object being to protect a portion of the figure in the photograph from the action of the light, and to partially shade the surface for a short distance around the figure.

The object of the plate *b* is to support the opaque body *c* a short distance above the picture, and also to diffuse the light falling on the unprotected portions.

The operation of my device is as follows: A plate of plain or ground glass, *d*, is placed in the printing-frame A, in the usual place of the negative, and, the sensitized paper having previously received the figure from the negative, all or nearly all of its surface, except the figure being white or uncolored, is now placed next the glass and there fastened, in the usual manner. The plate *b*, carrying the opaque body *c*, is now placed on the up-

per side of the frame and there fastened, the opaque body or screen being immediately over the figure, or that portion of it which it is desirable to protect. The frame is now placed where the sunlight will fall upon the sensitized paper through the plates *b* and *d*, and there allowed to remain until the "ground" surrounding the figure is sufficiently dark. That portion immediately beneath the center of the opaque screen *c* is not changed, while the surrounding portions are gradually blended with the general surface, thus effectually relieving the high lights of the picture, and giving transparency to the shadows.

The common manner of producing this effect has been heretofore for the operator to protect a portion of the picture by holding some opaque substance between it and the light, which substance must be kept in nearly constant motion, to prevent sharp lines and shadows in the blending. This is a slow, tedious, and expensive process, and requires the constant attention of the operator.

With my device a much finer effect can be produced with the same ease and rapidity as ordinary photographic printing, the combined action of the plate *b* and the air-space between it and the plate *d* and picture causing the light to be so diffused as to produce an even and soft blending of the shadows around that portion protected by the opaque body *c*.

The plate *d*, instead of being plain or ground, may have traced upon it any fancy design, which will then be transferred to the picture in the process of tinting.

I am aware of the device of Jacob Stehman for a similar purpose, for which Letters Patent were issued under date of March 10, 1868, in which a portion of the figure is protected by means of a beveled opaque body, having a central post projecting upward, and retained in position on the picture by means of elastic cords passing from the central post to pins in the frame. A ground-glass shade of cylindrical form is also used to diffuse the light. This device must be frequently moved while the process of printing is going

on, to prevent the shadow cast by the elastic supporting-cords from showing in the picture; and I do not claim anything set forth in the said Letters Patent; but

I claim as my invention—

In an apparatus for vignetting photographs, the combination of the frame A, transparent

or semi-transparent plates *b* and *d*, and opaque screen *c*, substantially as and for the purpose set forth.

LORENZO D. JUDKINS.

Witnesses:

H. P. HOOD,

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