R. Knecht,

Daguerreotype Plate-Holder.

No. 10,508. Patented Feb. 7, 1854.

Fig. 1.

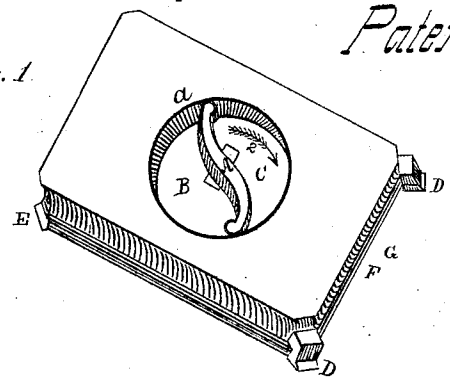


Fig. 2.

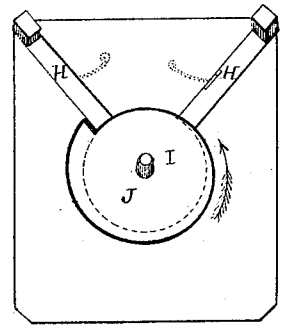


Fig. 3.

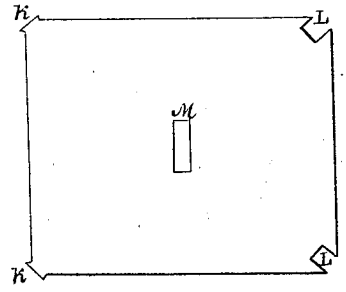
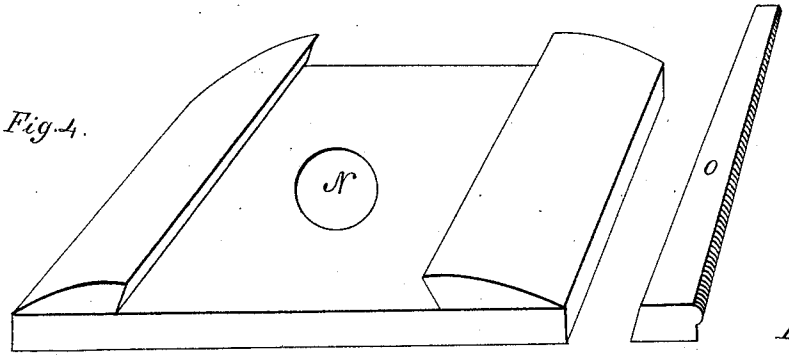


Fig. 4.



Witnesses

Inventor

UNITED STATES PATENT OFFICE.

REUBEN KNECHT, OF EASTON, PENNSYLVANIA.

IMPROVED DAGUERREOTYPE-PLATE HOLDER.

Specification forming part of Letters Patent No. **10,508**, dated February 7, 1854.

To all whom it may concern:

Be it known that I, REUBEN KNECHT, of the borough of Easton, in the county of Northampton and State of Pennsylvania, have invented a new and Improved Mode of Holding Daguerreotype-Plates for Cleaning and Polishings; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and letters of reference thereon.

The nature of my invention consists in providing two corners of the holder with two movable arms which are projected by an eccentric wheel turned by a swivel and providing the holder with an oblong aperture for the shaft of the eccentric wheel to move to one side or the other, according as one or the other of the arms require a further projection.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is an inverted view showing the swivel and the arms projected. Fig. 2 is a plan view of the arms and eccentric wheel with its upper shaft. Fig. 3 is a plan view of the surface of the holder and the oblong aperture, and in which Fig. 4 is a perspective view of the block and key for fastening the holder.

The part marked A represents the swivel, constructed of iron or other material, for turning the eccentric wheel J, to which it is attached; B, the oblong aperture for allowing the shaft I of the eccentric wheel J to move toward either side of the holder; C, a circle of such diameter that the swivel A may revolve within it, and the wood within the circle excavated of such depth that the swivel A and the adjoining wood *a* will form a level plane; D D, the ends of the arms as they appear when projected; E, one of the prominences of the part of the holder represented by F F; F F, that part which is attached by screws or otherwise to G G and forms a level plane and the surface of the holder, as represented in Fig. 3; G G, that part of the holder in the excavated circle C of which the swivel A turns, and in which on its opposite side to the swivel A the eccentric wheel J and the arms H H are embedded to the depth of their own thickness, and through which the oblong aperture B is made, and the edges of which part are grooved for the purpose of fastening it into the block represented in Fig. 4; H H, the surface of each arm, which are placed diagonally and embedded in the wood; J, the surface of the eccentric wheel, its body being also embedded in the wood; I, the shaft of the eccentric wheel J, which turns and moves in the oblong aperture M in Fig. 3; K K, a plain view of both prominences of F F in Fig. 1, one which appears and is designated as E in said figure; L L, notches in the corners of F F aforesaid, so as to admit the arms to be thrown inward, and so that the surface of the thick part of the arms (which are thicker at their ends than elsewhere) and the surface of F F aforesaid or the surface of the holder will form a level plane; M, the oblong aperture in F F aforesaid, and in which the shaft I turns and moves; N, the head of a large screw embedded to the depth of its own thickness in the block, which screw extends through the bench or whatever the block may be placed upon for use. The lower end of this screw is fastened by a hand-bar, and by slightly unscrewing the hand-bar the block may be turned in any direction desired; O, the key for fastening the holder in the block represented by Fig. 4. One block suffices for all-sized holders. A small holder may be placed in the block lengthwise, a larger size sidewise, and when the holder is still larger a grooved frame-work of about the size or somewhat larger than and corresponding with G G in Fig. 1 may be placed upon the holder, in which case it is not necessary that the swivel A be inserted in the wood, as in the drawings.

The dotted lines 1 1 in Fig. 2 represent springs which throw the arms H H inward when the swivel A is unturned, which springs may or may not be applied, as they enhance the cost without adding materially to the value of the holder.

The arms H H, the eccentric wheel J, the shaft I, the swivel A, and F F, or Fig. 3, I construct of iron or other material that may answer the same purpose. The remaining part I construct of wood.

In order to fasten the daguerreotype-plate to the holder for cleaning and polishing or other purpose, I clip a small piece from each corner of the said plate, as usual, and then bend down the corners, so as to form a hook at each corner. I then place the two prominences K K of the holder, one of which is seen and designated as E in Fig. 1, into two of the hooks of the plate, and then by turning the eccentric wheel J from me by means of the swivel A, the two arms D D are projected and pass into the two remaining hooks of the plate and remain firm and stationary by its own friction. By reversing the motion of the swivel the arms D D pass inward and the plate is readily removed. The projection of the arms D D or H H is effected by the radius of the eccentric wheel J, gradually increasing as the swivel A is turned from me. The object of the oblong apertures B and M, in which the shaft I and its opposite one work, is to allow the eccentric wheel to shift to one or the other of the sides, according as one or the other of the arms require a further projection.

What I claim as my invention, and desire to secure by Letters Patent, is—

The application of the eccentric wheel J to the projection of the arms H H or D D, which is effected by turning the swivel A, which is firmly attached to the wheel aforesaid in the direction of arrow 2, and the application of the oblong aperture B to the projection of either arm D D, according as one or the other of the arms require a further projection, for the purposes above particularly described.

REUBEN KNECHT.

Attest:

G. W. STOUT,

WM. J. BROWNE.