

2 Sheets-Sheet 1.

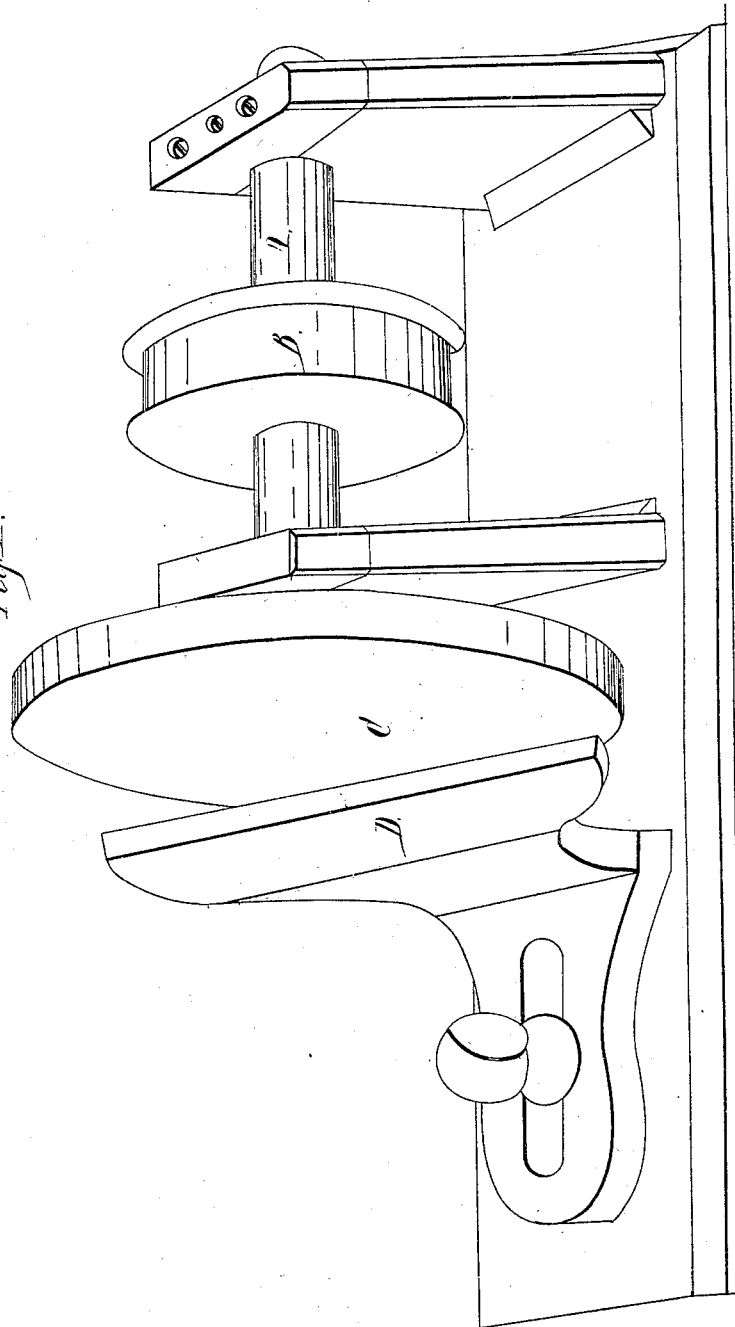
J. Johnson,

Polishing Metal Plates.

N^o 2,391.

Patented Dec. 14, 1841.

Fig. 1.



2 Sheets-Sheet 2.

J. Johnson,

Polishing Metal Plates.

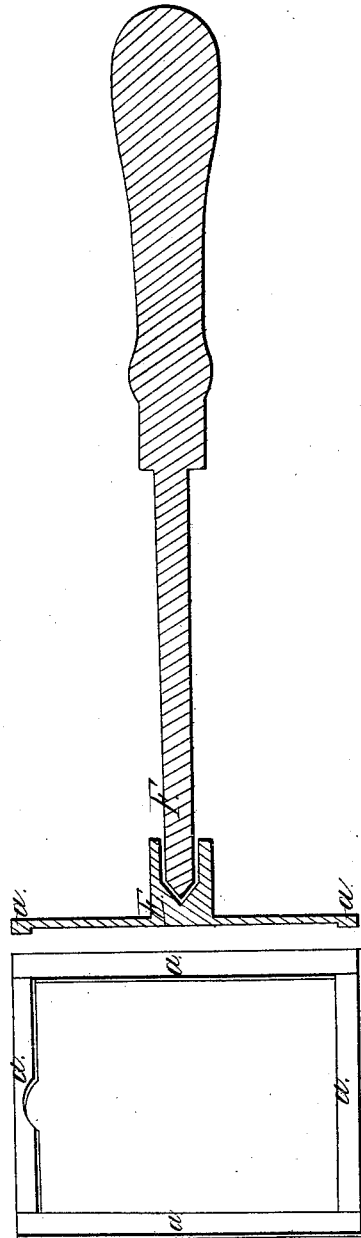
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Fig. 4.

Fig. 3.

Fig. 2.



UNITED STATES PATENT OFFICE.

JOHN JOHNSON, OF NEW YORK, N. Y.

APPARATUS FOR POLISHING THE PLATES USED IN TAKING LIKENESSES FOR OTHER OBJECTS IN WHICH SUCH PLATES ARE REQUIRED.

Specification of Letters Patent No. 2,391, dated December 14, 1841.

To all whom it may concern:

Be it known that I, JOHN JOHNSON, of the city of New York, in the State of New York, have invented a new and useful Improvement in the manner of and apparatus for polishing the plates used in taking daguerreotype likenesses or other pictures of a like kind and which apparatus and manner of procedure may be applied to the polishing of other articles; and I do hereby declare that the following is a full and exact description thereof.

The polishing of the metallic plates, is to be effected by means of a flat disk, attached to the mandrel of a lathe, or to a spindle or mandrel made for the purpose, and running in the manner of a lathe mandrel; for plates of the size ordinarily used for daguerreotype likenesses, a disk of five or six inches in diameter, is sufficiently large; but for larger plates the size must be correspondingly increased. These disks are converted into polishing buffs, by covering them with cotton velvet, corkwood, leather, or other suitable material, which may be charged with pumice-stone, rotten-stone, rouge, powdered charcoal, or other polishing substance. So far there is not anything new in the apparatus used by me; the novelty consisting in the manner in which the plate to be polished is held against the polishing disk, or buff. In this operation I use a flat piece of metal or other suitable substance a little larger than the plate to be polished, and around the edge on one face of this I affix a ledge or rim, within which the plate is to be received, said ledge not rising as high as the thickness of the plate to be polished; this instrument I will call my plate holder. On the other side of this plate holder and at its center I affix a socket of metal, which is to receive a pointed wire or rod, upon which it may revolve, said wire, or rod, being furnished with a suitable handle. At the front of the polishing buff I place a rest, upon which to sustain the rod or wire and upon this it is to be moved back and forth, so as to vary its distance from the center of the buff. The plate to be polished being held against the buff, by means of this apparatus, and the spindle being rapidly turned, the plate also

will revolve rapidly, and by this motion and by the gradual shifting of the rod toward and from the center of the buff, the polishing will be effected in a very short space of time, and that without the producing of lines upon the face of the polished metal, which can scarcely be avoided in any of the ordinary modes of procedure, while at the same time the polishing is performed with much greater rapidity than in any other way.

In the accompanying drawing Figure 1, represents the spindle, buff, and rest; A being the spindle, furnished with a whirl B. The buff is shown at C, and the rest in the front of it at D. Fig: 2, represents the face of my plate holder, surrounded by ledges *a a*. Fig. 3 is a section through the middle of said plate holder; E, being the socket which is to receive the point F, of the wire or rod, Fig. 2.

The operation of this apparatus will be similar to that of Bogardus' eccentric mill, but it differs from it both in the object for which it is employed and in the means of employing it; the object being to operate upon one of the revolving bodies, and the difference in the means consisting in the rendering of the body, or plate, to be acted upon capable of being shifted toward and from the center of the buff or operating disk.

Having thus fully described the nature of my invention and the manner of carrying the same into operation, what I claim therein as new, and desire to secure by Letters Patent is —

The polishing of metallic plates for daguerreotypes or other purposes, by means of an instrument such as I have denominated a plate holder in combination with a wire or rod, received within a socket upon which the said plate holder, and the contained plate, may revolve when held against a polishing disk or buff; and by which it may be shifted toward or from the center of said buff, the whole apparatus being arranged combined, and operating, substantially as herein set forth.

JOHN JOHNSON.

Witnesses:

THOS. P. JONES,
M. JONES.