

(No Model.)

E. B. CORE.

Apparatus for Retouching Negatives.

No. 232,115.

Patented Sept. 14, 1880.

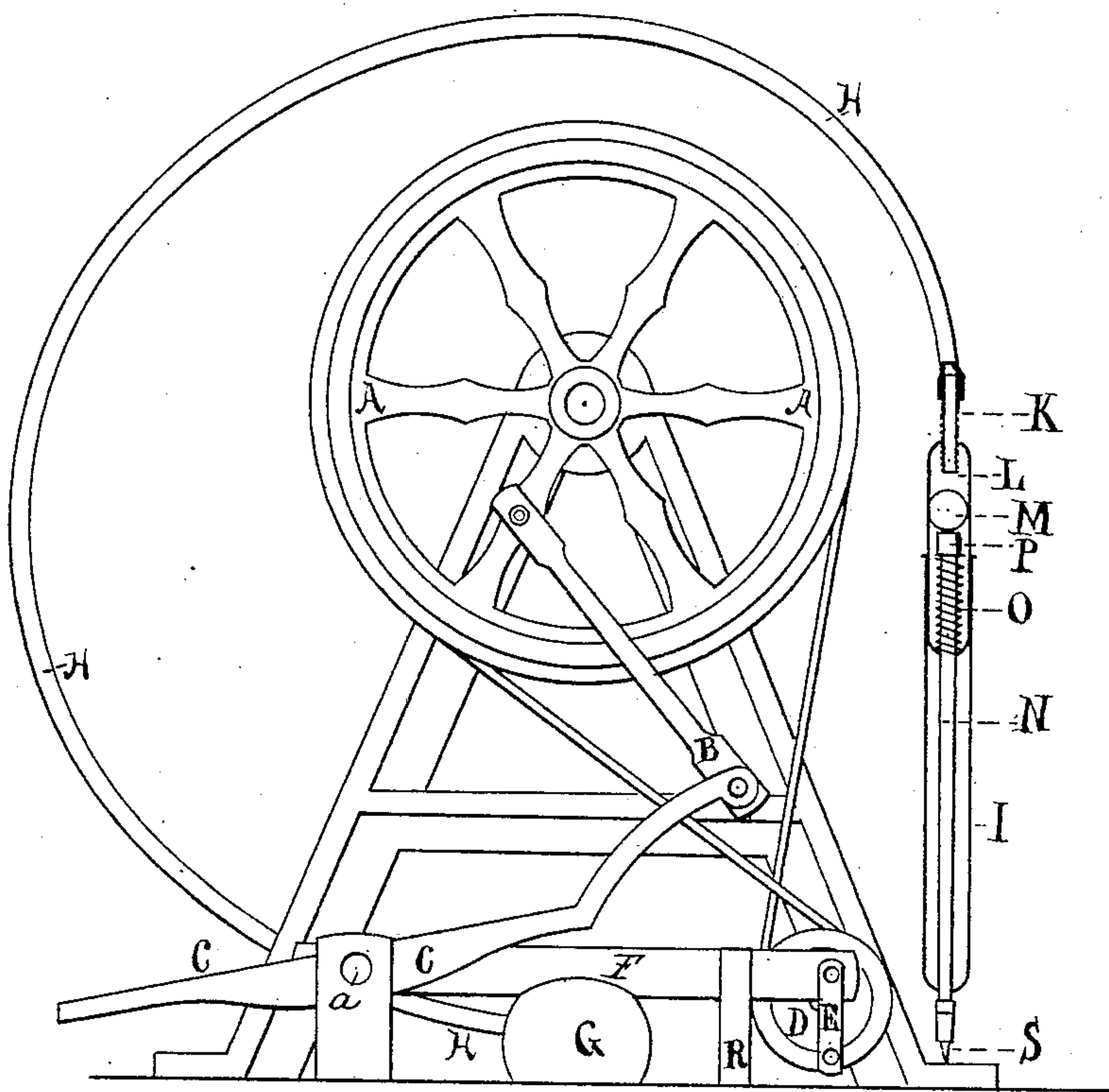


Fig 1

WITNESSES

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APPARATUS FOR RETOUCHING NEGATIVES.

SPECIFICATION forming part of Letters Patent No. 232,115, dated September 14, 1880.

Application filed March 10, 1880. (No model.)

To all whom it may concern:

Be it known that I, ELIJAH B. CORE, a resident of the city of Lincoln, in the county of Logan and State of Illinois, have invented a new and useful Improvement in an Apparatus for Retouching and Improving the Negatives taken by Photographers for the purpose of Printing Photographs, of which the following is a specification.

This invention relates to certain new and useful improvements in an apparatus especially designed for removing the spots and blemishes and defects from negatives before printing the photographs, by retouching the same with a pencil or some other suitable article.

The drawing represents a view of the invention and the manner of working the same.

A represents a drive-wheel, of any suitable and appropriate size, which is put in motion by means of the arm B and treadle C. The belt or cord passing around the wheel A is attached to and puts in motion the smaller wheel D. To this wheel D is attached the short arm E, which is also attached to the longer arm F. The arm F extends and is connected and fastened to the rod or support which holds the treadle C. (Said rod is marked *a*.)

G represents a rubber ball, or its equivalent, hollow and air-tight, which is placed and rests under the arm or lever F. To G is fastened the tube H, also of rubber and of appropriate length, which, in turn, is attached to the pencil I in the following manner, to wit: The tube H is adjusted to the regulator K, which is hollow and threaded on the outside, and may be considered a part of the pencil I. The following is a description of the inside of the pencil I: The end of the regulator K reaches and extends into the chamber L of the pencil. In the side of this chamber L are some small apertures for the purpose of furnishing air. In the chamber L is the solid ball M, of any suitable material, which moves at pleasure in the chamber L, between the end of the regulator K and the rod N. The rod N also enters the chamber L, and extends on through the pencil, and has fastened at its other extremity the point of lead-pencil, or any other point that may be found useful for the purposes of the

invention, which point we mark S. O is an ordinary spiral spring around the rod N, working between the end of the chamber L, and attached to the rod N at a point, P, in any suitable manner.

R is a rubber band or a spring attached to the arm F in such a manner as to regulate its motion, and be of use in aiding in counteracting the upward pressure of the ball G.

The manner of working the invention is very simple, and as follows, to wit: Upon the working of the treadle C the drive-wheel A is put in motion. This revolves the small wheel D by means of the belt. The wheel D gives a motion to the arm E, which, in connection with the band or spring R, imparts a vertical motion to the arm F. The arm F, in its downward strokes, strikes the ball G, driving the air from it through the tube H and regulator K, and against the ball M in the chamber L. This solid ball M is thus made to strike the rod N, giving it an outward tendency. The upward movement of the arm F releases the pressure upon G, which, being released, returns to its normal position, forming a vacuum in the chamber L, and the air passing into said chamber through the apertures thereof causes the ball M to return to the end of regulator K. The motion thus produced gives the rod N and the point S a very rapid motion. The force of the stroke is governed and regulated by the regulator K, as by this means the distance in the chamber L, between the end of the regulator K and the rod N, in which the ball M moves is changed and varied. The greater this distance the harder the stroke will be.

Now, by holding the pencil I in the hand and placing the point S upon the negative to be retouched in the different places the very rapid and delicate strokes of the point S will very soon remove all defects, such as spots and blemishes, in the most satisfactory manner.

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

1. In an apparatus for retouching negatives, the combination, with the pencil S and tube H, spring O, and ball M, of the hollow rubber ball G, arm or lever F, with its at-

tachment R, and the operating mechanism, substantially as and for the purpose herein shown and described.

5 2. In an apparatus for retouching negatives, the combination of the treadle C, lever B, wheels A D, connected by an endless band, connecting rod or lever E, lever F, with its attachment R, hollow ball G, tube H, adjustable regulator K, and chamber L, having the

ball M, rod N, adjustable spring O, and pencil S, the several parts constructed and relatively arranged to operate substantially as and for the purpose herein shown and described.

ELIJAH B. CORE.

Witnesses:

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