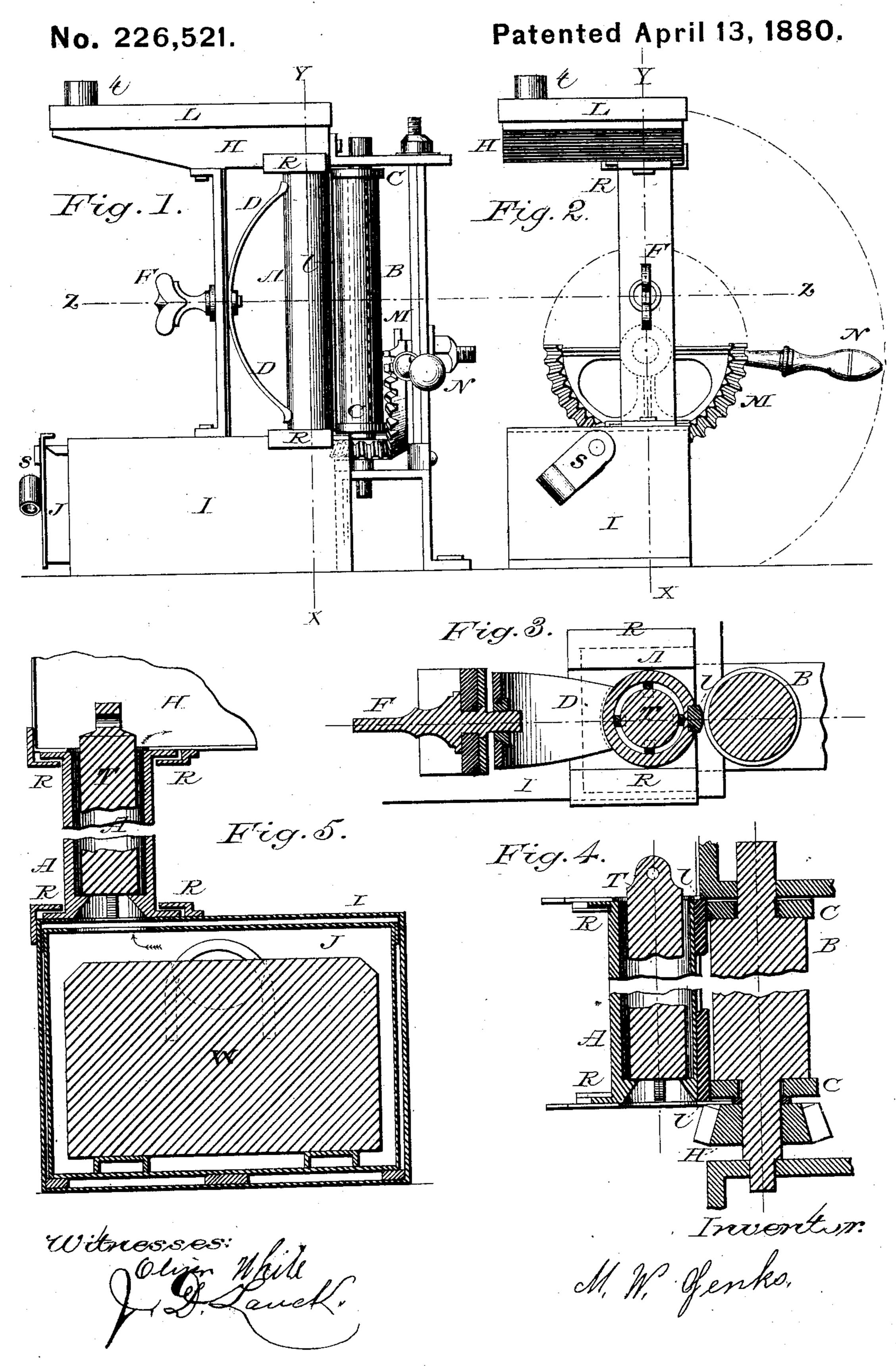
M. W. JENKS. Photograph-Burnisher.



United States Patent Office.

M. WOODBURN JENKS, OF BLUE MOUND, ILLINOIS, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO JOHN W. K. McCLURE, OF SAME PLACE.

PHOTOGRAPH-BURNISHER.

SPECIFICATION forming part of Letters Patent No. 226,521, dated April 13, 1880.

Application filed December 17, 1879.

To all whom it may concern:

Be it known that I, M. Woodburn Jenks, of Blue Mound, Macon county, Illinois, have invented a new and useful Improvement in Photograph-Burnishers, of which the following

is a specification.

The invention relates to that class of machines made for the purpose of putting a firm glossy finish on photographs or any kind of 10 paper cards. Heretofore that kind of work has been done by machines working horizontally, which is objectionable for the following reasons, viz: They obtain their heat from a lamp directly under the burnishing-plate and 15 roller, thereby smoking them and creating a dirty sweat, which must be continually wiped off, and even then it frequently soils the photograph from the fact that it is face downward and is spoiled before the operator knows that 20 the burnisher is soiled. There are two ways of trying to avoid this. One is to use absolute alcohol in the lamp, which method is too expensive, and does not prevent the sweating. The other is to remove the burnisher, and when 25 hot replace it. This is also objectionable, because it is impossible to keep a uniform heat, and the delay consequent upon this heating often occasions the loss of much valuable time, and, again, the burnisher often gets so hot as 3° to destroy many pictures. Another serious objection to all burnishers now in use is, that the motion is too slow to do good work. The surface to be polished should pass rapidly over the hot burnisher. Another objection is, that 35 they require too much labor, the present machines only making one revolution to every complete turn of the crank, thus causing the card to move very slowly.

The object of my invention is to get a greater variety of ways of heating the burnisher, so that small galleries may choose that mode of heating which is cheapest and most convenient to them, and at the same time do good

clean work and do it rapidly.

In operating my invention the operator works the lever with the right hand and feeds with the left, standing in a position to watch the face of the picture, which is at the left, and which slides in or against the burnishing-plate.

In the different sizes the lever is gaged to

suit the size of any card, so that the operator need not retain his hold on the card, which will pass through just to the margin and back without drawning out antil frield.

without dropping out until finished.

The burnisher may be heated in the follow- 55 ing different ways: first, by coal; second, by a block of iron previously heated in the fire and inserted in the fire-box; third, by an alcohol-lamp, or a fluid-burner, or by a gas-jet; and, lastly, by heating the small iron rod and 60 dropping it into the flue which holds the burnishing-plate, the heat being regulated by the damper in front of the fire-box.

When the heat is obtained by coal in the fire-box I use the radiator in the flue and turn 65 it in any position required to heat the burnisher evenly. There is a stove-lid hole in the firebox and one over the flue, so that the fire can

be utilized in any way required.

In drying negatives or any kind of plates, 70 put the wire rack over the fire-box or on the hot-air box over the flue. I also use an adjustable stove-pipe in any place that the burnisher may be needed to avoid smoke.

In the accompanying drawings similar let- 75

ters of reference indicate like parts.

Figure 1 is a perspective elevation embodying my invention. Fig. 2 is a side elevation of the same, showing the hand-lever, drivegear, and main stove. Fig. 3 is a horizontal 80 section on the line Z Z, showing the spring, cylinder, flue, and roller. Fig. 4 is a vertical section on the line X Y in Fig. 2, showing a section of cylinder A and roller B and the heating-iron T. Fig. 5 is a vertical section on 85 the line X Y in Fig. 1, showing the sliding grooves of cylinder A, the main stove I, containing the fire-box J, with damper S, and grates for burning coal.

The flue-hole is directly under the opening 90 in the cylinder A, through which the fire passes, heating the steel polishing-plate l, which is inserted in a dovetailed groove in the face of cylinder A, the heat passing into the hot-air chamber H, heating the plate-drier L, 95 and passing out through the stove-pipe t. The cylinder A is fitted at each end in sliding grooves R, and held in position by the tension of spring D D, thereby holding the burnishing-plate l firmly against the washer C on 100

each end of roller B. The washer C protrudes beyond the surface of roller B enough to protect the polished face of the burnishing-plate l from being scratched by the rough finish on the roller B.

F is a thumb-screw regulating the tension

of spring D D.

S is a damper, and when closed will make

the stove air-tight.

The lever N is attached to drive-wheel M, and when given a vertical motion causes the roller B to make two revolutions to each stroke of the lever. When it is necessary to have another fire in the same room this can be used to heat the block of iron W in Fig. 5, which is placed in the stove I in place of the fire-box; or I heat the round block of iron T and drop it into the flue of the cylinder, which is a convenient and cheap way of heating the burnisher; but when it is desirable to heat by

gas or a burner of any description, take out the fire-box J and insert the burner instead.

In using gas or the fluid-pressure burner the burners are so constructed that the blaze can be placed directly under the flue of the cylin-25 der, so that the burnisher can be heated without heating the main stove I when so desired.

What I claim is—

In photograph-burnishers, the upright roller B, provided with flanges or washers G, in combination with the upright cylinder A, held in position by the adjustable spring D, and provided with the polishing-plate l and the heater I, substantially as described, and for the purpose set forth.

M. WOODBURN JENKS.

Witnesses:

O. UHRICH, W. L. CLEMENTS.