J. F. SEYMOUR.

Stamp-Drying Machine.

No. 210,472. Patented Dec. 3, 1878.

Fig: 1.

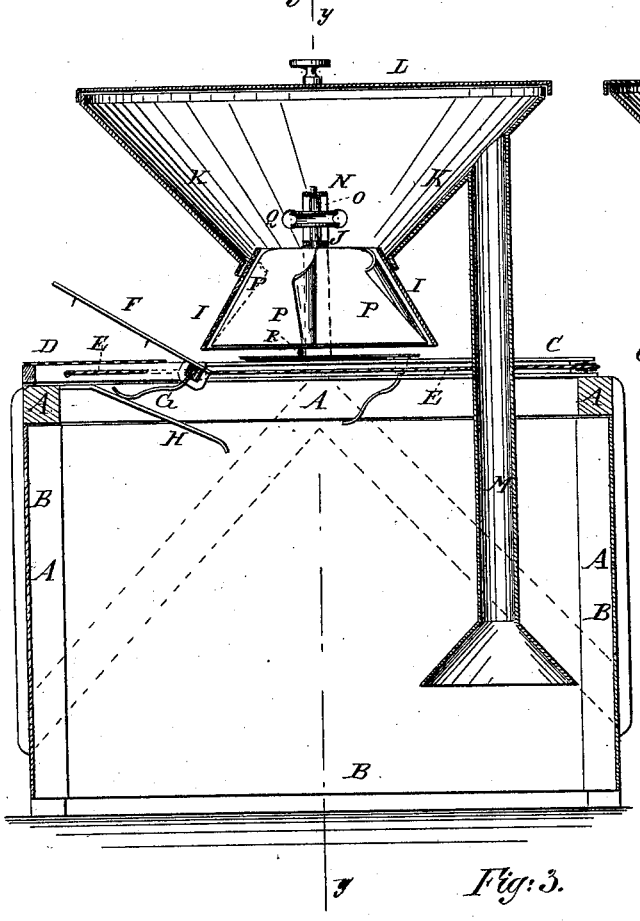


Fig: 2.

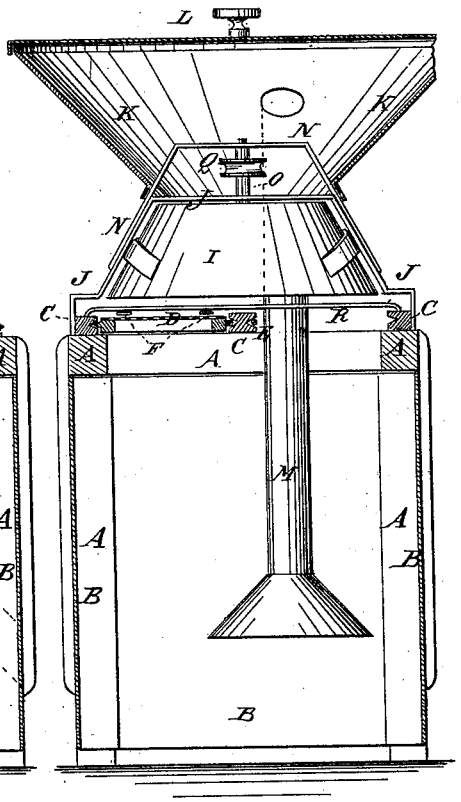
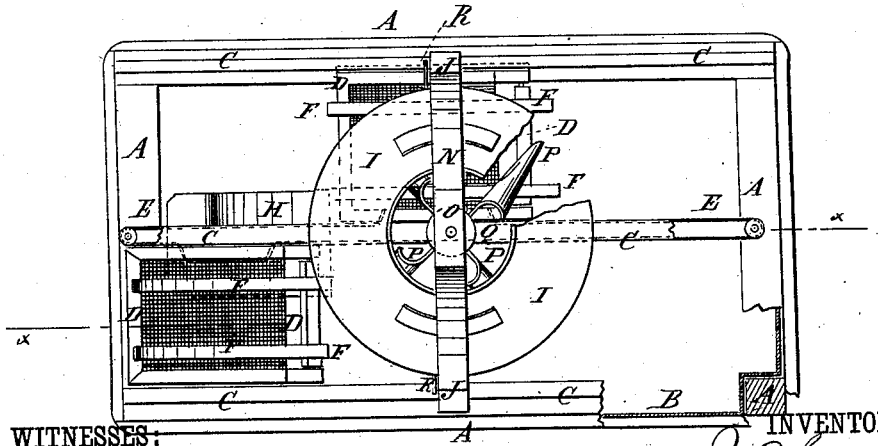


Fig: 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN F. SEYMOUR, OF NEW YORK, N. Y.

IMPROVEMENT IN STAMP-DRYING MACHINES.

Specification forming part of Letters Patent No. **210,472**, dated December 3, 1878; application filed October 18, 1878.

To all whom it may concern:

Be it known that I, JOHN F. SEYMOUR, of the city, county, and State of New York, have invented a new and useful Improvement in Stamp-Drying Machines, of which the following is a specification:

Figure 1 is a vertical longitudinal section of my improved machine, taken through the broken line *x x*, Fig. 3. Fig. 2 is a vertical cross-section of the same, taken through the line *y y*, Fig. 1. Fig. 3 is a top view of the same, parts being broken away to show the construction.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish a machine for drying sheets of postage-stamps and other gummed paper or material, so as to avoid the expenditure of time and labor and to save the space required when the gummed sheets are placed upon racks and left there until dry.

The invention consists in the combination of the racks, the endless cord, the clamping-bars, the projecting arms, and the inclined plate with each other and with the grooved bars attached to the incased frame; in the combination of the double cone-case, the pipe, and the fan-wheel, made with curved or scroll-shaped wings, with the incased frame and with the sliding racks.

A represents the frame of the machine, which may be made of any convenient length, breadth, and height, and which should be provided with a casing, B, of some suitable material to confine the heated air. To the top of the frame A are attached three parallel bars, C, one at the center and one at each side. The side bars C are grooved upon their inner sides, and the center bar C upon both sides, to adapt them to serve as ways for the racks D to slide back and forth upon. The racks D are formed by attaching wire-cloth to frames, and are made of suitable size to receive a sheet of the gummed material. The inner side bars of the frames of the racks D are attached to an endless cord or chain, E, which passes longitudinally around the center bar C, and around pulleys pivoted to the ends of the said bar, so that each of the racks may be drawn out by pushing the others in. The gummed sheets are kept in place upon the racks D by clamping-bars F, which are provided with pins to enable them to hold the gummed sheets more securely, and have holes in their inner ends to receive rods pivoted to the inner ends of the side bars of the rack-frames, and are secured to said rods by set-screws, so that they may be adjusted to take hold of the margins of the sheets, where they are free from gum, whether the said sheets be larger or smaller. To the inner parts of the pivoted rods, or to the inner bars, F, are attached arms G, which project downward and forward, so as to strike an inclined plate, H, attached to the frame-work of the machine, when the racks are moved out, to raise the clamping-bars F and release the sheets, so that they can be easily removed from the racks and placed in piles. The clamping-bars F are closed down upon the gummed sheets when the racks are pushed in by coming in contact with the rod R, attached to the frame-work beneath the lower edge of the conical case I, which is attached to and supported by a bar, J, the ends of which are attached to the side bars of the frame A. The case I is made in the form of a hollow truncated cone, and upon its upper part is placed a case, K, made in the form of an inverted hollow truncated cone, and which has its upper end closed with a detachable cover, L. With an opening in the upper part of the side of the upper case K is connected the upper end of the pipe M, which passes down into the rear part of the incased frame A B, and the lower end of which is made funnel-shaped to collect the heated air and conduct it into the upper case, K. Directly beneath the funnel-shaped lower end of the pipe M is designed to be placed one or more burners, burning mingled gas and air, so as to produce an intense heat without smoke or flame. One or more such burners should also be placed in the incased frame A B, to increase the heat. Any other heat-producing appliances may be used, if desired.

To the bar J, and to another bar, N, placed above it and having its ends bent downwardly and attached to it, is pivoted a shaft, O, to the lower part of which, within the lower case, I, are attached wings P, the outer edges of which are curved forward into scroll shape, so as to collect the heated air and project it downward

upon the gummed sheets upon the racks D as they are alternately pushed in beneath the lower case, I.

To the part of the shaft O between the bars J N is attached a pulley, Q, to receive an endless cord, which passes through holes in the side of the upper case, K, and is designed to be connected with any convenient driving mechanism.

With this construction the peculiar form of the connected cases K I and the wings of the fan-wheel O P will project the heated air directly and forcibly upon the gummed sheets, so as to drive off the moisture and dry them almost instantly, so that they can be placed in piles at once without it being necessary to place them upon drying-racks, thus effecting a great saving in time, space, and labor, and consequently in the cost of manufacture.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of the racks D, the endless cord E, the clamping-bars F, the projecting arms G, and the inclined plate H with each other and with the grooved bars C, attached to the incased frame A B, substantially as herein shown and described.

2. The combination of the double cone-case I K, the pipe M, and the fan-wheel O P, made with curved or scroll-shaped wings, with the incased frame A B and with the sliding racks D, substantially as herein shown and described.

JOHN F. SEYMOUR.

Witnesses:

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