J. W. MASURY.

Paint Mill.

No. 107,939. Patented Oct. 4, 1870.

Fig. 1.

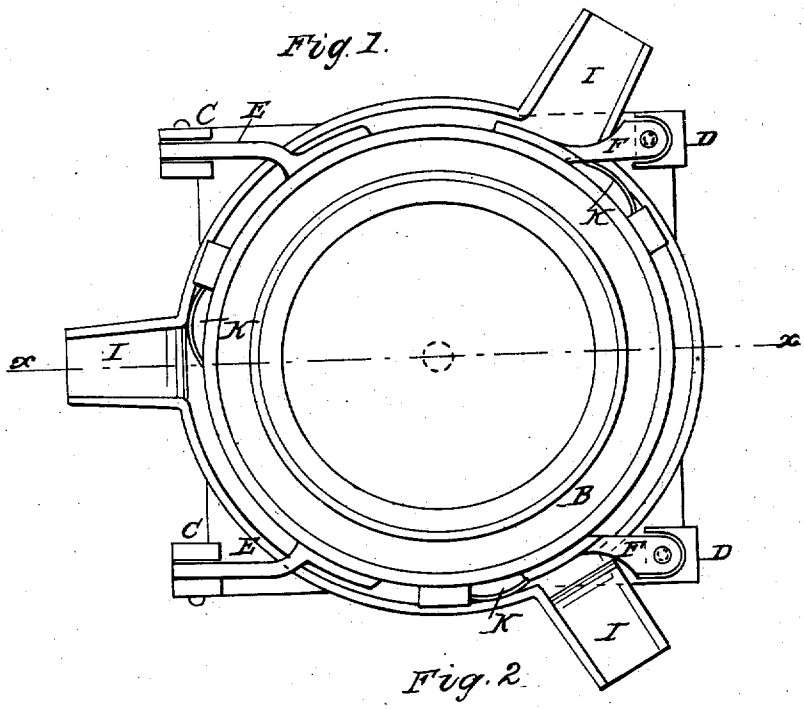
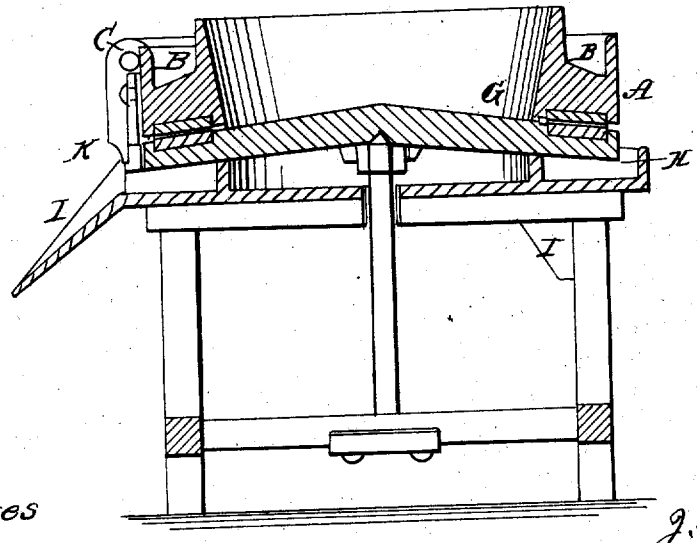


Fig. 2.



Witnesses

Gustave Dieterich

Alex. L. Roberts

Inventor

J. W. Masury

Munn & Co

atty.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JOHN W. MASURY, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN PAINT-MILLS.

Specification forming part of Letters Patent No. **107,939**, dated October 4, 1870.

To all whom it may concern:

Be it known that I, JOHN W. MASURY, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Paint-Mills; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to paint-mills; and consists in certain improvements thereon, which will be specified in the claims hereinafter.

Figure 1 is a plan view of a paint-mill constructed according to my improvements, and Fig. 2 is a transverse sectional elevation of the same.

Similar letters of reference indicate corresponding parts.

A is the metallic plate of the upper fixed stone, and B an annular trough in the top of the same; or it may be a circular or other hollow space, closed in so as to confine steam therein, in which hollow space, however formed, I propose to maintain in any suitable way, and by any suitable pipe connections, or by means of siphons, a circulation of cold or hot water or steam, for controlling the temperature of the stones and the substance being ground.

The friction of the stones, especially in grinding paints and other wet substances, generates a high degree of heat, which is in many cases injurious to both the stones and the paint, for which reason it is highly necessary to control the temperature, which should be varied for different substances, and this I propose to do by using either cold or hot water or steam, according to the requirements of the substances under treatment.

The said upper stone, A, is suspended on the tops of the posts C D of the frame by means of the arms E F, permanently attached to the periphery and resting on the said posts, the arms E being hinged to the posts C, so as to swing up and down thereon, and the arms F being detachably connected to the posts D, and preferably resting in recesses in the tops, the more securely to govern the position of the stone. To raise the stone A off the bed-stone G, the connections of the arms F are released, and it is swung over on the joints of the arms E, with the posts C, to any suitable support.

In the ordinary arrangements of these mills, only one discharge-orifice and one scraper are used for delivering the ground paint; consequently it drips down over the periphery of the lower stone into the curb H, and, being of a very sticky nature, greatly obstructs the running of the stone in being moved around by the contact of the bottom and sides of the stone when the curb is filled up to it. I propose, therefore, to provide a plurality of discharge-spouts, I, from the curb, and to arrange a scraper, K, at each spout, to detach the paint issuing from between the stones, so as to prevent it from falling below the periphery of the runner. By this means I am enabled to discharge into a plurality of vessels also, and thereby less attendance is necessary, as they fill slower and do not require to be removed so often.

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

1. The combination, with a movable bed-stone, G, of an upper fixed metallic plate, A, having an annular space hollowed out of the upper part thereof, around which a constant stream of fluid is caused to flow for regulating the required temperature of the stones in paint-grinding mills.

2. The combination, with stones A G, of a series of scrapers, K, and discharge-spouts I, correspondingly arranged and constructed to prevent the drip of viscid paint over the curb H, and the consequent obstruction of the running-stone, all as described.

The above specification of my invention signed by me this 10th day of January, 1870.

JOHN W. MASURY.

Witnesses:

GEO. W. MABEE,

ALEX. F. ROBERTS.