SAND BLAST FOR SATIN FINISHING METALS.

APPLICATION FILED OCT. 14, 1916.

1,226,621. Patented May 15, 1917.

FIG. 1.

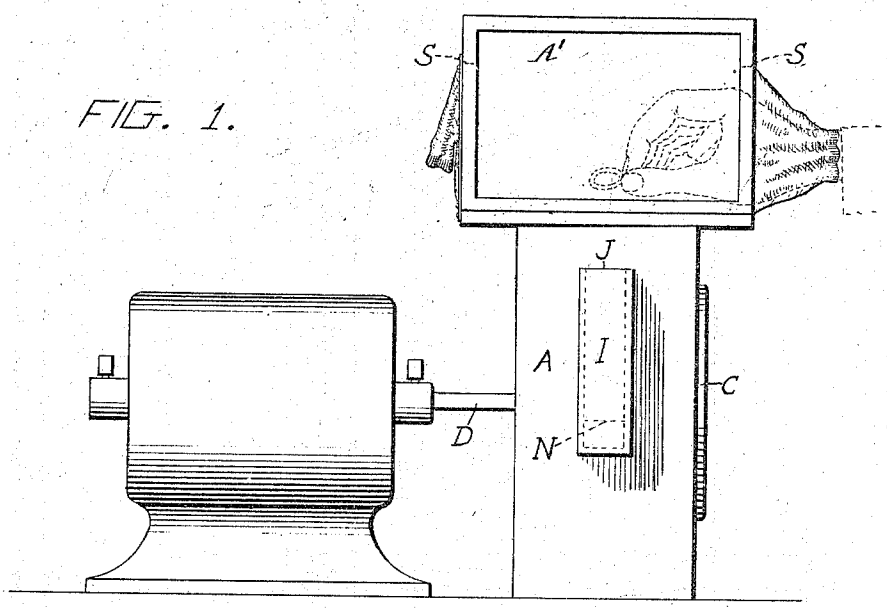


FIG. 2.

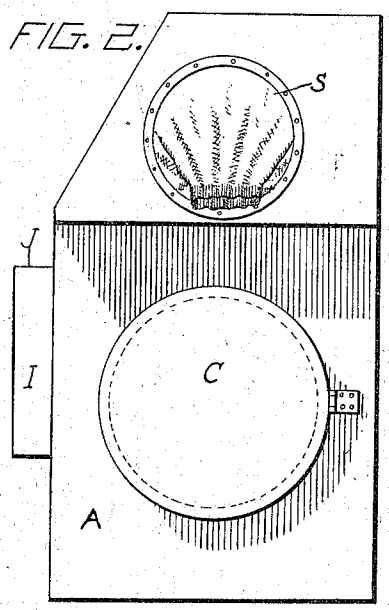


FIG. 3.

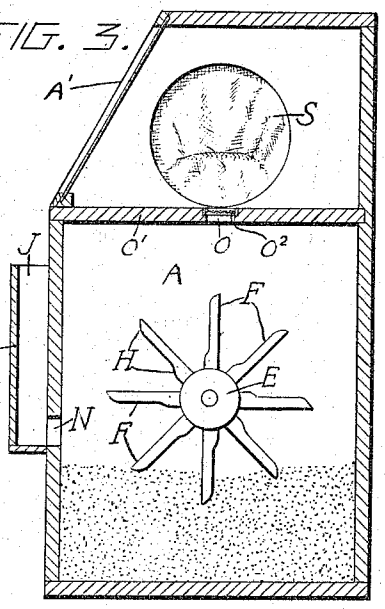
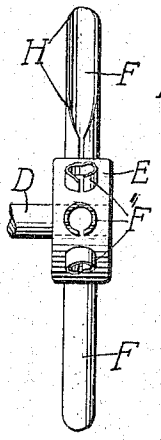


FIG. 4.



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SAND-BLAST FOR SATIN-FINISHING METALS.

1,226,621. Specification of Letters Patent. Patented May 15, 1917.

Application filed October 14, 1916. Serial No. 125,643.

To all whom it may concern:

Be it known that I, EMIL GIELAND, a citizen of the United States, residing at Charlotte, in the county of Mecklenburg and State of North Carolina, have invented certain new and useful Improvements in Sand-Blasts for Satin-Finishing Metals; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in sand blasting apparatus for satin finishing or frosting metals, and consists in a simple and efficient device of this character having various details of construction and combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claim.

My invention is illustrated in the accompanying drawings, in which similar letters of reference indicate like parts in the various views, and in which:

Figure 1 is a front elevation of the sand blast apparatus showing a motor applied thereto.

Fig. 2 is a side elevation.

Fig. 3 is a vertical sectional view, and

Fig. 4 is a detail view of the arms of a fan.

Reference now being had to the details of the drawings by letter, A designates a casing of any suitable size or shape and having an inclined face A of glass, and C is a door whereby access may be had to the lower portion of the casing. Hand holes S are formed in the opposite walls of the casing above a partition, and a sleeve of cloth or other suitable material is secured to the marginal edge of the hand hole and adapted to fit tightly about the arm of the person holding the article to be given the frosted or satin finish and which will prevent the sand passing through the hole. An operating shaft D is journaled in suitable bearings in the frame of the casing and carries a fan E having a series of fingers F which are hollow, with portions thereof tapered away as at H.

An air intake is designated by letter I and has a passageway opening to the atmosphere at a point designated by letter J and an inlet at N into the interior of the casing.

An aperture O is formed in a partition O′ within the receptacle, and O^2 is a screen which is fitted over the hole O and serves as a means for preventing any articles dropping through on to the fan. When the article to be frosted is of sufficiently large size not to pass through the hole, the screen may be dispensed with.

Sand of proper fineness is placed in the lower portion of the casing and, when the fan is given a rapid rotary movement through the power mechanism, the suction produced by the fan causes air to be drawn into the casing through the passageway provided therefor, and the rapid suction produced by the rotary fan will cause the sand to be drawn up and thrown forcibly against the article to be satin finished.

What I claim to be new is:—

In a sand blast apparatus, a casing including an upper chamber and a lower sand containing chamber, a partition between the chambers and having a central opening therein, a wheel journaled within the sand containing chamber, said wheel being supported in a plane directly under the central opening, scoop-shaped members provided on the wheel, said scoop-shaped members adapted to scoop up sand and throw the same toward said opening, and means for rotating the wheel.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

EMIL GIELAND.

Witnesses:

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