## G. G. COCHRAN. Machines for Polishing Moldings.

No.151,847.

Patented June 9, 1874.

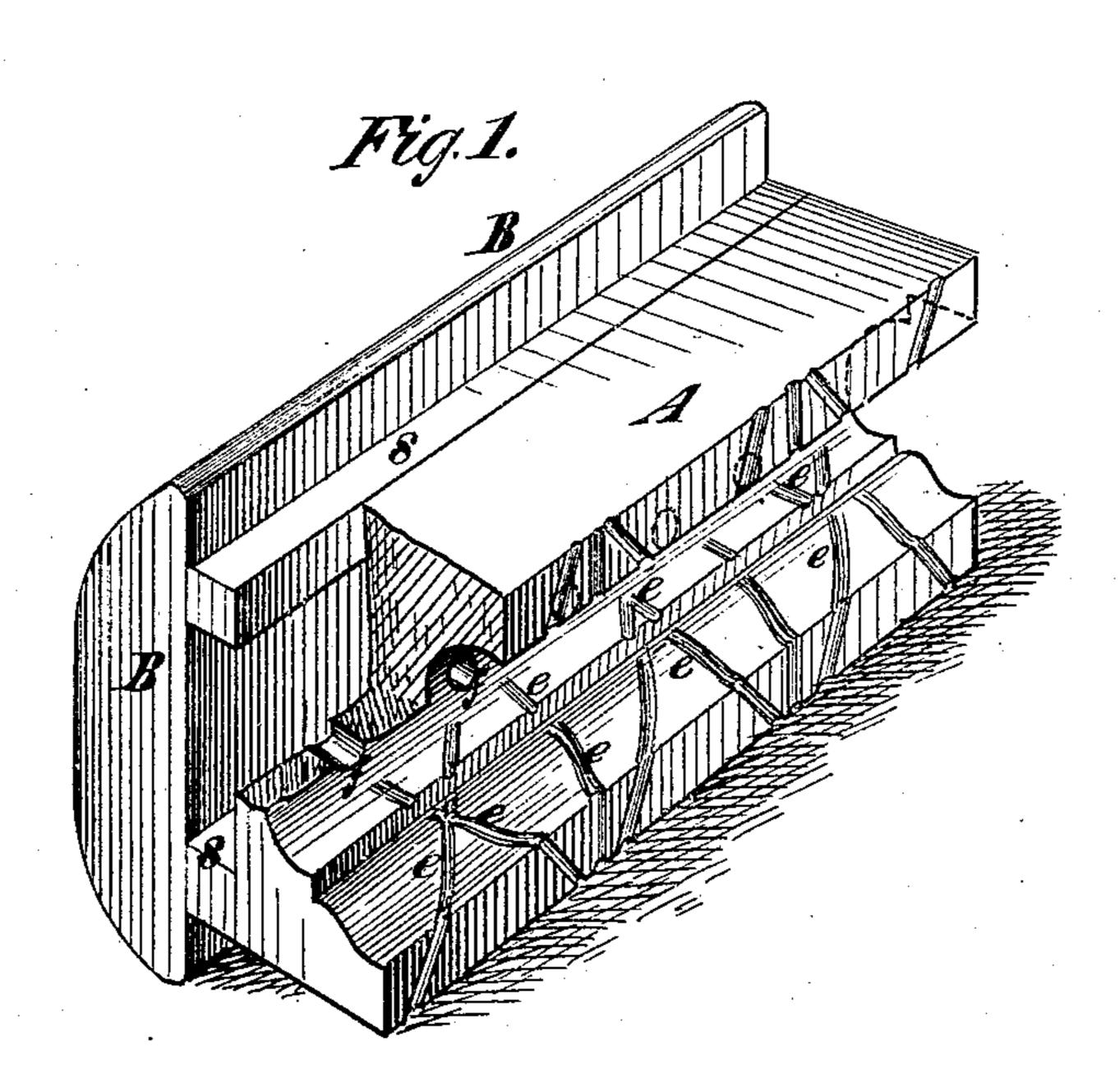
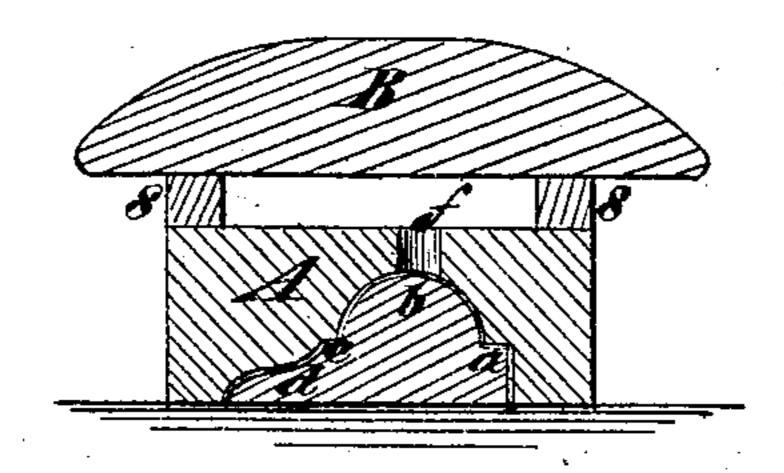


Fig.Z.



Witnesses, John Beeker Tret. Haynes Inventor. Jeorge G. Cochrom bythis Attorneys Rown vertlen

## United States Patent Office.

GEORGE G. COCHRAN, OF FLATBUSH, ASSIGNOR TO HIMSELF AND JOHN
A. DAYTON, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN MACHINES FOR POLISHING MOLDINGS,

Specification forming part of Letters Patent No. 151,847, dated June 9, 1874; application filed April 6, 1874.

To all whom it may concern:

Be it known that I, GEORGE G. COCHRAN, of Flatbush, in the county of Kings and State of New York, have invented an Improvement in Machines for Polishing Moldings, of which

the following is a specification:

This invention consists in a scourer or polisher made of a solid piece or block of abrasive material, and having its scouring or polishing face shaped to conform or correspond to the face of the molding or other surface to be scoured or polished by it, such scourer or polisher being adapted to be operated in a machine or by hand, and being very superior to sand-paper for smoothing or finishing curved, undulating, or angular surfaces, and very much more durable. The invention is more especially applicable to what is known as "sand-papering" wood moldings, though applicable to polishing metal and other materials.

In the accompanying drawing, Figure 1 is a perspective view of a scourer or polisher of this improved kind, adapted to polish a molding, and furnished with a hand-piece; and Fig. 2 is a cross-section of the same applied to the molding which it is intended to polish.

A designates the scourer or polisher, which in this instance is adapted to scour or polish a molding, a b c d, consisting of a fillet, a, a semicircular round or torus, b, a fillet, c, and an ogee, d. It is made of a single solid piece of some suitable abrasive material—say, for instance, sand, emery, powder, or pulverized glass bound by a suitable binding substance, and its face or operative surface is preferably shaped by casting or molding the material, while in a plastic state, in or upon a piece of the molding, or an exact pattern of the molding for which such polisher is intended, because when thus shaped it will more perfectly conform to all parts of such molding than it could possibly do when made in any other way, and hence will operate more uniformly on all parts. ee are grooves or small channels, which traverse the face of the polisher in different directions, to give clearance to the dust produced by the operation of polishing,

such dust escaping either at the edges of the polisher or through holes ff extending through its back. In this instance the polisher is fastened to a hand-piece, B, consisting of a piece of wood or other material suitably shaped to enable it to be held conveniently in the hand, and having on one side two ribs or strips, s s, to which the polisher is fastened. The polisher, thus furnished with a hand-piece, is moved back and forth along the molding until a smooth surface is imparted thereto. It will be understood, however, that it is not confined to this mode of use, but is adapted to be operated by machinery, and is eminently fitted to serve as a substitute for sand-paper or emery-paper, as commonly used for finishing moldings and the like, being incomparable with either sand-paper or emery-paper as regards durability, because of its solid form, and, besides, being capable of a more perfect adaptation to the various forms of moldings, because of the mode of manufacturing or forming it directly on the molding which it is to polish.

This polisher, as already intimated, is adapted to all forms of moldings and other curved, undulating, or angular surfaces, and is also especially useful for polishing rosettes. It is very cheap and simple in construction, and can be used almost interminably, without re-

quiring any fixing whatever.

I am aware that a revolving polisher has been constructed from a piece of metal provided with a scouring-surface, but such is not my invention.

I claim—

The method of making a scourer or polisher for finishing moldings and the like by casting or molding the abrasive material, in a plastic state, directly on such moldings, or on an exact pattern thereof, substantially as and for the purpose herein specified.

GEO. G. COCHRAN.

Witnesses:
MICHAEL RYAN,
VERNON H. HARRIS.