

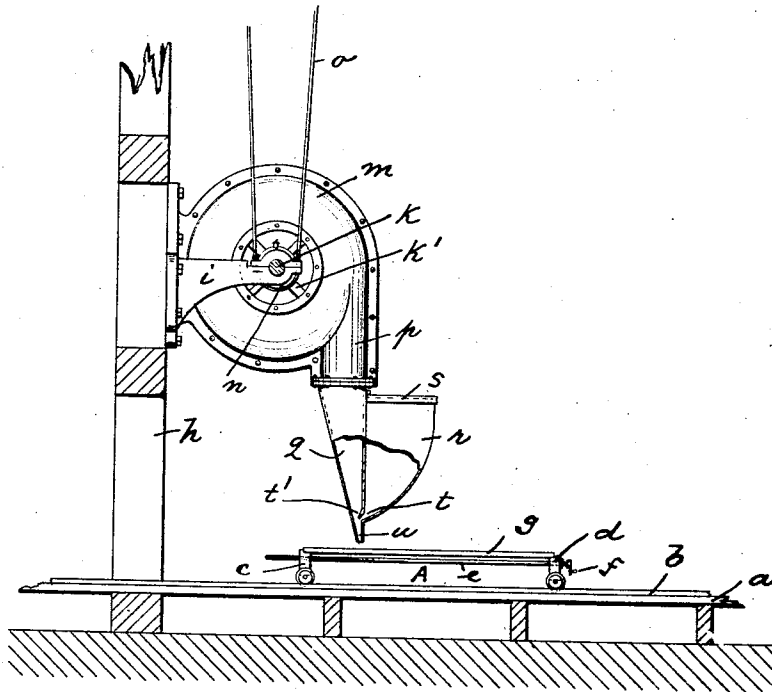
(No Model.)

M. WALTER.

PROCESS OF AND APPARATUS FOR CLEANING AND POLISHING LOOM REEDS.

No. 587,892.

Patented Aug. 10, 1897.



WITNESSES:

INVENTOR :

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UNITED STATES PATENT OFFICE.

MATHIAS WALTER, OF PATERSON, NEW JERSEY.

PROCESS OF AND APPARATUS FOR CLEANING AND POLISHING LOOM-REEDS.

SPECIFICATION forming part of Letters Patent No. 587,892, dated August 10, 1897.

Application filed June 17, 1896. Serial No. 595,882. (No model.)

To all whom it may concern:

Be it known that I, MATHIAS WALTER, a citizen of the United States, residing in Paterson, county of Passaic, and State of New Jersey, have invented certain new and useful Improvements in Processes of and Apparatus for Cleaning and Polishing Loom-Reeds; 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 drawing, and to letters of reference marked thereon, which forms a part of this specification.

This invention relates to a new and useful method of and apparatus for cleaning and polishing loom-reeds; and it consists in forcing powdered cleansing and polishing material, such as pumice-stone or powdered glass, by means of compressed air or a blast of air onto and through the reed (and its dents) while the latter is slowly reciprocated.

It further consists in the improved apparatus used in connection with said method and in the combination and arrangements of parts thereof, substantially as will be hereinafter more fully described, and finally embodied in the clauses of the claim.

Referring to the accompanying drawing, which illustrates in front elevation my improved apparatus, *a* represents a table, and *b* the rails or track secured thereon in any desired manner. On said track is arranged and adapted to be reciprocated by hand or in any well-known manner the carriage *A*, consisting of the parallel frames *c* and *d*, provided with wheels and the adjusting-screw *e*, (with handle *f*,) passing through and adapted to regulate the distance between the said frames, as will be manifest. On said carriage is placed the reed *g*, as clearly shown.

Secured to the table *a* in any desired manner is a bracket frame or standard *h*, supporting the blower-casing *m* and the bearing-plates *i* for the shaft *k* thereof. By means of the pulley *n*, arranged on shaft *k*, and the driving-band *o*, operated by any well-known means, motion is imparted to the said shaft and the fan-blades *k'*, carried thereby. To the outlet *p* of said blower-casing is secured in any desired manner a nozzle *q*, tapering to

a flattened outlet *u* of a width substantially equal to the width of the reed and arranged closely to and approximately at right angles with the said reed. On one side of said nozzle is arranged a receptacle *r*, provided with a lid *s* and communicating with the said nozzle through the opening *t*, which latter is provided with the hood *t'* in such a manner that the current of air passing through the said nozzle will create a suction at the said opening *t*, and thus suck the cleansing material contained in the receptacle *r* out of the said receptacle into the nozzle *q* and discharge the same through its outlet *u* onto and between the dents of the reed.

The reed after having been put together (in some instances by means of solder, in which latter case it is first washed out in boiling water) is dipped in an oil-bath and after withdrawal is placed on the carriage *A*, which latter is slowly reciprocated. The blower is started and the powdered cleansing and polishing material contained in the receptacle *r* is sucked into the nozzle, where it combines with the compressed air or air-current and is as such forced through the outlet onto and between the dents of the reed, whereby all scratches, sharp corners, dirt, oil, &c., is removed. After a specified time the reed is reversed and again subjected to the air blast or current and the cleansing material carried thereby. By this simple method the subjecting of a reed to a rubbing down with pumice-stone, its polishing inside and outside by means of kerosene and a brush, and its cleaning out with flour and brush are fully avoided.

The cleaning material, which is placed in the receptacle *r*, consists, preferably, of pumice-stone or powdered glass; but it will be manifest that other materials can be used and also that the arrangement of the apparatus can be altered without changing the scope of my invention; but

What I claim as new, and desire to secure by Letters Patent, is—

1. The method of cleaning or polishing loom-reeds which consists in oiling the surface of the reeds, and in subjecting the oiled surface to the action of an impinging stream of commingled air and polishing material.

2. An apparatus for cleaning and polishing loom-reeds, consisting of a reciprocating ad-

justable carriage, a blower; a tapering nozzle communicating with the blower and arranged at substantially right angles to the reciprocating carriage, and a receptacle communicating with said nozzle, all said parts, substantially as described.

5 In testimony that I claim the foregoing I

have hereunto set my hand this 10th day of June, 1896.

MATHIAS WALTER.

Witnesses:

WM. D. BELL,

DUNCAN M. ROBERTSON.