## United States Patent Office.

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## ART OF CLEANING FILES.

SPECIFICATION forming part of Letters Patent No. 412,771, dated October 15, 1889.

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To all whom it may concern:

Be it known that I, Jeremiah Eugene Mathewson, of Sheffield, England, a subject of the Queen of Great Britain, have invented a new and useful Improvement in the Manufacture of Files, of which the following is a true and exact description.

My invention relates to the manufacture of files, and has for its object the complete, ro rapid, and economical removal of the varnish or glaze formed on the files during the treatment by which they are hardened by the fusing of the protecting coating with which they are covered to prevent oxidation.

Heretofore the cleansing of files after hardening has been effected by hand labor and the use of brushes, requiring considerable time to insure the complete removal of the varnish. I have discovered that the glaze or varnish can be completely and rapidly removed by subjecting the files, after hardening, to the action of a rapidly-propelled jet of fluid abrasive mud, which should consist of very fine particles of sand or other abrasive

material mixed with water, and which should 25 be directed onto the points of the file-teeth, and so as to penetrate down to the bottom of the cuts between them. A stationary jet of fluid mud is most conveniently used, the file under treatment being held in tongs and 30 moved so as to bring all portions under the influence of the jet.

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

The method of cleansing files from the glaze formed by the protecting covering during the hardening process, which consists in subjecting them to the action of a rapidly-driven jet of fluid abrasive mud.

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