## UNITED STATES PATENT OFFICE.

J. PALMER, OF CLEVELAND, OHIO.

## IMPROVEMENT IN THE MANUFACTURE OF SAND-PAPER.

Specification forming part of Letters Patent No. 51,857, dated January 2, 1866.

To all whom it may concern:

Be it known that I, J. PALMER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in the Manufacture of Sand-Paper; 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 fully understand and make use of the same.

This invention consists in the application, to common sand, flint, or emery paper, of boiled linseed-oil or other equivalent fatty substance, in such a manner that after the paper has absorbed the oil, and said oil has become thoroughly dry and fixed in the pores of the paper, an article is obtained of much greater toughness and firmness than sand-paper made in the usual manner, and my sand, flint, or emery paper is more durable and economical than any other similar article.

In carrying out my invention I take sand, flint, or emery paper made in the usual manner, or I prepare such paper as usual, and after the sand, flint, or emery has been applied

to the surface of the sheets and the sheets have been thoroughly dried I apply to their backs boiled linseed-oil or other quick-drying fatty substance in such quantity as the fibers of the paper will absorb. The oil or fatty substance may be applied by hand or by suitable machinery, and after the sheets are saturated therewith they are left to dry. The oil penetrates the fibers of the paper and renders the same tough and tenacious, and paper prepared according to my process is much more durable, and consequently more economical in its use, than sand, emery, or flint paper prepared in the ordinary manuer and without the application of fatty substance.

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

Sand, flint, or emery paper saturated with boiled linseed-oil or other quick-drying fatty substance, as a new article of manufacture.

J. PALMER.

Witnesses:

GEO. A. KOLBE, GEO. HESTER.