## UNITED STATES PATENT OFFICE.

JOSEPH D. JONES, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN FIRE-BRICKS.

Specification forming part of Letters Patent No. 148,887, dated March 24, 1874; application filed March 18, 1874.

To all whom it may concern:

Be it known that I, Joseph D. Jones, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Manufacture of Fire-Bricks, of which the following is a specification:

My invention consists in a compound for the manufacture of fire-brick, the same consisting of the following ingredients, and in about the preportions specified: Fire-clay, sixty-six and two-thirds parts; burnt clay, sixteen and two-thirds parts; asbestus, sixteen and two-thirds parts.

Asbestus is a well-known non-conductor of heat, and therefore renders the brick fire-proof; it also gives it great tenacity, so that it will not crack from exposure.

Burnt clay hardens the brick, enables it to stand rough usage, and resist heavy cross-strains.

Fire-clay doubly insures the brick as a nonconductor of heat; it also tends to give the brick a finished and neat appearance after being baked.

The fire-clay and asbestus are taken separately and finely powdered in a suitable grind-

ing-mill, and then thoroughly mixed in a pugmill, or other suitable clay-mixing machine, sufficient water being added during the mixing operation to render the mass plastic. The burnt clay in a powdered state is thoroughly incorporated with the mixture resulting from the process above described. This compound is then molded and baked as in the ordinary manner of brick-making.

I am aware that the several ingredients herein specified have been used in brick-making, either separately or combined with other substances in different proportions, hence I do not claim the several ingredients when used separately; but

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

The compound for fire-brick, consisting of fire-clay, asbestus, and burnt clay, substantially in the proportions specified.

In testimony that I claim the foregoing I have hereunto set my hand.

JOSEPH D. JONES.

Witnesses:

HARRY COLEMAN, JAMES S. GRINNELL.