

UNITED STATES PATENT OFFICE.

JAMES KIERAN, OF COHOES, NEW YORK, ASSIGNOR OF PART OF HIS RIGHT
TO THOMAS MCGUINNESS AND ARTHUR MOAN, OF SAME PLACE.

IMPROVEMENT IN COMPOUND FOR FIRE-BRICKS, STOVE-LININGS, &c.

Specification forming part of Letters Patent No. **182,935**, dated October 3, 1876; application filed
June 16, 1876.

To all whom it may concern:

Be it known that I, JAMES KIERAN, of Cohoes, in the county of Albany and State of New York, have invented certain new and useful Improvements in the Manufacture of Stove Bricks and Lining; 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 which it appertains to make and use the same.

This invention consists, first, in an improved compound for the manufacture of fire-brick or stove-lining; and, second, in the method of manipulating said compound so as to shape the brick or lining, substantially as herein-after more fully described, and pointed out in the claims.

I take of old fire-brick, pounded so fine that it will go through a No. 4 sieve, three parts, and two parts of common yellow clay, dried, pounded, and sifted similar to the brick. I then take one part of fire-clay, one-half part of cement, and one part of common salt, all pounded fine. Carefully and thoroughly mix these ingredients, and then run them through a fine sieve, so as to cause the mass to be perfectly homogeneous. To this I then add water enough to form a plastic compound, which I press into square blocks by a snap-press, or any other kind of suitable, quickly-operating press. While still in a plastic state the blocks so formed are removed from the press, and,

with a knife, cut into the shape it is desired to give the bricks or lining, after which these are dried and ready for use.

My improved fire-brick is harder and more durable than the brick now commonly in use. The effect of the salt mixed with the other materials has the effect of preventing the brick or lining from cracking, however great the heat, and by pressing the mass into blocks which may easily be cut with a knife or any other sharp instrument, I am enabled to shape the brick or lining in such a manner that it will fit the stoves or ranges for which it is intended perfectly.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The compound for stove brick or lining composed by pounding, sifting, and mixing three parts of old fire-brick, two parts of yellow clay, one part of fire-clay, one part of salt, and one-half part of cement, then adding water and pressing the mass into blocks, substantially in the manner and for the purpose hereinbefore set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JAMES KIERAN.

Witnesses:

ARTHUR MOAN,

THOMAS MCGUINNESS.