

# UNITED STATES PATENT OFFICE.

W. P. BLAKE, OF NEW YORK, N. Y.

## IMPROVEMENT IN LININGS FOR IRON SAFES, &c.

Specification forming part of Letters Patent No. 9,461, dated December 14, 1852.

*To all whom it may concern:*

Be it known that I, WM. P. BLAKE, of the city and county and State of New York, have invented a new and Improved Method for Preventing the Escape or Transmission of Caloric, of which the following is a full and exact description.

My invention consists in applying the protoxide of zinc in its finely-divided amorphous condition as a filling or packing around or within the walls of iron safes, refrigerators, steam-pipes, steam-chambers, locomotive-boilers, hot-air flues and chambers. I use the oxide of zinc in its dry state alone, of any desired thickness, and retain it in its place around flues or pipes by suitable casings of wood or by a case of common muslin, cloth, or canvas.

The chief and great advantages which zinc oxide has over any other substance heretofore used for the purposes herein named are as

follows: In its light amorphous condition it is almost a non-conductor of heat, it is incombustible and unchanged by heat. It is not granular, but packs and condenses closely and tightly. It is very light and is insoluble in water. It does not injure or discolor the surfaces with which it is brought in contact.

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

The application of amorphous zinc oxide as a lining for safes and refrigerators, and as a covering for steam-pipes, steam-chambers, locomotive-boilers, hot-air flues and chambers, in such manner as to prevent the transmission or conduction of caloric into or from such chambers or flues.

WM. P. BLAKE.

Witnesses:

THOS. DUGUIDE,  
ENOCH ARMITAGE.