

# UNITED STATES PATENT OFFICE.

OLIVER RODNEY MOFFET, OF JOPLIN, MISSOURI.

## MANUFACTURE OF SOOT-KILLERS.

SPECIFICATION forming part of Letters Patent No. 639,859, dated December 26, 1899.

Application filed August 1, 1899. Serial No. 725,754. (No specimens.)

*To all whom it may concern:*

Be it known that I, OLIVER RODNEY MOFFET, of Joplin, in the county of Jasper and State of Missouri, have invented certain new and useful Improvements in the Manufacture of Soot-Killers, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved composition of matter designed for use in furnaces, stoves, and the like to remove accumulated soot, so as to keep the flues, pipes, tubes, &c., perfectly clean to insure long life to the flues, &c., and to permit a proper radiation of the heat.

The composition of matter consists, essentially, of the following ingredients compounded in about the proportions stated: zinc, seventy per cent.; charcoal-dust, twenty per cent.; oil, ten per cent. This composition readily burns, and in order to use it for killing or destroying soot it is burned in a furnace or stove or other fire-box having communication with the flues, pipes, tubes, or the like containing the soot to be consumed, or the composition of matter may be directly burned in the flue, pipe, &c., to be cleaned of soot.

In burning the composition of matter carbonic-oxid gas is formed, which in coming in contact with the soot consumes the same, the products of combustion passing through the smoke and gases of the furnace out of the chimney in the usual manner.

In preparing the composition of matter I preferably employ a furnace in which zinc-

blende, silicate of zinc, carbonate of zinc, or other zinc composition is burned to reduce the charge into zinc fumes. The fumes are mixed in any suitable manner with charcoal-dust, and the charcoal and the zinc are mixed with black oil or like combustible material, which also serves to bind the zinc and the charcoal-dust together. This composition is now ready for use in the manner above described.

The charcoal and oil added to the zinc forms a combustible matter, but not an explosive one. If desired, zinc ore rolled down to one hundred and fifty mesh may be mixed in with the zinc fumes, so as to give the composition of matter a good body. It is understood that the zinc fumes are very light and must receive another substance to give them body and weight, so that they will readily burn without danger of being drawn off with the smoke and gases through the furnace to the chimney and without accomplishing the desired result.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

The herein-described composition of matter to be used as a soot-killer, consisting of zinc, charcoal and oil in about the proportions stated.

OLIVER RODNEY MOFFET.

Witnesses:

GEO. RAINS,  
JIM LEEPER.