## UNITED STATES PATENT OFFICE.

RICHARD COVERT, OF BROOKLYN, NEW YORK.

## IMPROVED ARTIFICIAL LUMP-COAL.

Specification forming part of Letters Patent No. 48,372, dated June 27, 1865.

To all whom it may concern:

Be it known that I, RICHARD COVERT, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Artificial Lump-Coal; and I do hereby declare the following to be a sufficiently full and exact description of the same to enable any one acquainted with the art to which my said invention appertains to produce the article.

My artificial fuel consists of coal-dust, gastar, pitch, or artificial asphaltum, and dead or heavy oil, intimately mixed together by the aid of heat, and afterward aggregated into solid lumps by pressure by machinery or otherwise. The coal, if not fine enough, is ground, and gastar, pitch, or artificial asphaltum is mixed with it in any desirable proportions, dead or heavy oil in sufficient quantity to permeate the entire mass, and the whole is then heated and stirred

by machinery until it becomes thoroughly mixed and plastic. It is then by the same apparatus forced into molds and by heavy pressure united into solid lumps, after which it is ejected from the molds onto suitable endless bands, which carry it to any suitable receptacle.

I do not claim novelty in the combination of anthracite-coal dust and powdered asphaltum.

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

As a new article of manufacture, the artificial lump-coal, consisting of coal-dust, gas-tar, pitch, or artificial asphaltum, and dead or heavy oil, mixed by heat and stirring and aggregated by pressure, as hereinbefore described.

RICHD. COVERT.

Witnesses:

WILLIAM PALMER, D. G. DIXON.