United States Patent Office.

MICHAEL F. MAGINNIS, OF PHILADELPHIA, PENNSYLVANIA.

ARTIFICIAL FUEL AND METHOD OF MAKING SAME.

SPECIFICATION forming part of Letters Patent No. 774,682, dated November 8, 1904.

Application filed January 23, 1904. Serial No. 190,381. (No specimens.)

To all whom it may concern:

Be it known that I, MICHAEL F. MAGINNIS, a citizen of the United States, residing at Philadelphia, in the State of Pennsylvania, have in-5 vented a new and useful Artificial Fuel and Method of Making Same, of which the following is a specification.

This invention relates generally to an artificial fuel and method of making the same, and 10 more particularly to one adapted for the use in steam-boiler furnaces where soft coal is now

employed.

The object of the invention is to provide a composition which will be cheap and efficient 15 and one which will not be affected by climatic changes, and one which will not dry out and blow away when permitted to remain for any considerable length of time.

Another object is to provide an artificial 20 fuel which will be ready for use as soon as the ingredients are thoroughly commingled, thereby avoiding the necessity of briqueting

and baking the mass.

With these various objects in view my in-25 vention consists in the various ingredients hereinafter referred to and combined in the proportions and in the manner hereinafter set forth.

In carrying out my invention I employ two 3° thousand pounds of bituminous coal finely powdered, to which is added forty pounds of anthracite-coal ashes finely sieved. These ingredients are thoroughly mixed in a cold and dry state. I then prepare a solution 35 consisting of one hundred and twenty pounds of salt and seventy pounds of water at a temperature of 130° Fahrenheit, and the coal and

ashes are then added to this solution and thoroughly mixed for a period of two minutes, and I then add twenty pounds of meal, the 40 residue of linseed-oil for the purpose of waterproofing the composition. It also keeps the mixture in a moist condition, so that in case a quantity of this fuel should remain about the furnace-room or other place it will not dry 45 out and be blown away, but will remain in a semiplastic condition, so that none of the fuel is wasted by permitting it to lie around.

Having thus fully described my invention, what I claim as new, and desire to secure by 50

Letters Patent, is—

1. An artificial fuel composed of two thousand pounds bituminous coal finely powdered, forty pounds of anthracite-coal ashes finely sieved, one hundred and twenty pounds of salt 55 and seventy pounds of water together with twenty pounds of meal, the residue of linseedoil.

2. The herein-described method of preparing artificial fuel, which consists in mixing to- 60 gether finely-powdered bituminous coal, and anthracite-coal ashes, in the proportions set forth, preparing a solution of salt and water in the proportions and at the temperature named, then mixing the coal and ashes with 65 the said solution for a predetermined time and then adding meal, the residue of linseed-oil in the quantity specified, and thoroughly mixing the entire mass.

MICHAEL F. MAGINNIS.

Witnesses:

ISAAC D. HETZELL, RICHARD CURRY.