

UNITED STATES PATENT OFFICE.

AUGUSTE ROMEAU, OF CLEVELAND, OHIO.

ARTIFICIAL FUEL.

SPECIFICATION forming part of Letters Patent No. 301,525, dated July 8, 1884.

Application filed August 3, 1883. (No specimens.)

To all whom it may concern:

Be it known that I, AUGUSTE ROMEAU, a citizen of the United States, residing at Cleveland, county of Cuyahoga, and State of Ohio, have invented a certain new and useful Improvement in Artificial Fuel; and I do hereby declare the following to be a description of the same, and of the manner of making and using the invention, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it appertains to make and use the same.

My artificial fuel is made from the waste or refuse of coal, mixed with animal-blood and quicklime. The coal may be either hard or soft, the fuel being very easily made from anthracite coal. The material used may be the ordinary refuse or waste, such as the slack, screenings, or dust of coal. This coal waste is united with the quicklime and blood in parts and proportions substantially as follows: To a ton of coal refuse, twenty gallons (more or less) of animal-blood is used, and twenty-five pounds (more or less) of pulverized quicklime. The blood and the quicklime may be first mixed together, then added to the coal refuse, and the entire mass be well mixed together. The blood and the quicklime form a pasty compound, which serves as a binder to hold the particles of the coal refuse together. The mixture is then molded into form for fuel.

The several ingredients of the mixture are very cheap, and hence the resultant fuel is of slight initial cost.

The form of the fuel may vary with the use for which it is intended. Thus, for domestic use, the block may be smaller than when intended for the use of manufactories.

The machinery required to make the fuel is very simple, as but slight pressure is required in molding.

The fuel is ready for use within a day after its manufacture, as the blocks dry quickly after being taken from their molds.

The fuel burns like ordinary coal, preserves its form until nearly consumed, and leaves but little ashes.

By applying varying degrees of pressure during molding, the blocks may be made more or less compact, thereby causing the fuel to burn more or less freely.

If it is desired that the fuel shall be quite compact so as to burn a long while, the coal refuse may be ground to a corresponding degree of fineness previous to the addition of the quicklime and blood. The blood, when dry, ignites readily, thus adding to the combustibility of the coal.

The fuel is clean to handle, and is not appreciably affected by water.

If it is desired to make the fuel cheaper than it can be produced by using pure blood in the proportions previously set forth, a less quantity of pure blood may be diluted with water sufficient to make the described proportion.

Heretofore certain fertilizing compounds have used one or more of the elements employed in my mixture. For instance, one uses blood and slaked lime; another uses blood, coal, and a phosphate. The difference in unity of composition between such fertilizers and my fuel is apparent.

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

The herein-described artificial fuel, consisting of a compound of coal refuse or dust, animal-blood, and quicklime, united in parts and proportions, substantially as described, said compound being pressed and molded into blocks, substantially as set forth.

In testimony that I claim the foregoing to be my invention I have hereunto set my hand this 31st day of July, A. D. 1883.

AUGUSTE ROMEAU.

Witnesses:

THOS. B. HALL,
J. W. BREEN.