

UNITED STATES PATENT OFFICE.

GEORGE D. PLATT, OF LITCHFIELD, ILLINOIS, ASSIGNOR TO FRANK BURNES AND E. M. BOLEY, OF ST. LOUIS, MISSOURI.

COMPOUND FOR MANUFACTURING ARTIFICIAL FUEL.

No. 833,801.

Specification of Letters Patent.

Patented Oct. 23, 1906.

Application filed December 4, 1905. Serial No. 290,330.

To all whom it may concern:

Be it known that I, GEORGE D. PLATT, a citizen of the United States of America, residing in the city of Litchfield, county of Montgomery, State of Illinois, have invented a new and useful Compound for Manufacturing Artificial Fuel, which is fully set forth in the following specification.

This invention relates to a compound for producing artificial fuel whereby a very low grade of culm, coal-dust, or the like may be utilized in the production of fuel of great efficiency either for the production of steam, heating purposes, or for the various kinds of domestic use; and the invention consists of certain novel features of combination of elements, which are hereinafter clearly set forth—that is to say, the artificial-fuel composition or compound consists of the following ingredients, combined, substantially in proportion as herein set forth: potato-pulp, five pounds; cornmeal, five pounds; rice, three pounds; clay, two hundred pounds; alum, five pounds; borax, four pounds; sulfate of zinc, eight ounces; rosin, five pounds; washing-soda, six ounces; gum-shellac, five ounces; laundry soap, two bars; common salt, ten pounds; glucose, eight ounces.

In carrying out this invention five pounds of potato-pulp, five pounds of cornmeal, three pounds of rice, five pounds of alum, four pounds of borax, eight ounces of sulfate of zinc, five pounds of rosin, six ounces of washing-soda, five ounces of gum-shellac, two bars of laundry soap, ten pounds of common salt, and eight ounces of glucose are to be thoroughly commingled by heat and agitation, and when these elements are thoroughly commingled the compound is thickened by adding two hundred pounds of clay. The compound is then removed from the heat and let dry. When the compound is sufficiently dry, mix it with ten tons of culm, coal-slack, or the like. All being mixed thoroughly, the

entire composition is run through a conveyer, which is installed with a sufficient amount of steam to moisten the compound and culm or coal-slack to make a complete flexible composition. From the conveyer the composition is run into a pressing-machine, and from there it is carried in its formations through a heated tube or oven, and thereby becomes a hardened substance of sufficient resistance to withstand any ordinary handling. The result of this will be that ten tons of culm, coal-slack, or the like mixed as above stated is converted into ten tons of marketable coal or fuel, which can be used in any ordinary stove, boiler, or furnace, either for domestic or manufacturing purposes, and which will have the same heat-giving powers as that possessed by the best grade of anthracite or bituminous coal. The coal or fuel will be smokeless, cinderless, and odorless, and perfectly clean to handle, being free from dust and all odors.

I am aware that a composition of crude oil or cake-meal, salt, and acetic acid has been used for the same purpose; but I am not aware that all the ingredients of my composition as set forth above have been used together as a compound.

I claim as my invention—

A compound consisting of, five pounds of potato-pulp, five pounds of cornmeal, three pounds of rice, five pounds of alum, four pounds of borax, eight ounces of sulfate of zinc, five pounds of rosin, six ounces of washing-soda, five ounces of gum-shellac, two bars of laundry soap, ten pounds of common salt, eight ounces of glucose, and two hundred pounds of clay, all in combination with ten tons of coal-slack, culm, or the like.

GEORGE D. PLATT.

Witnesses:

E. M. BOLEY,
GEO. D. TAYLOR.