

UNITED STATES PATENT OFFICE.

WILLIAM BROWNELLE THOMAS, OF TOWNS, GEORGIA.

ARTIFICIAL FUEL AND PROCESS OF PRODUCING SAME.

SPECIFICATION forming part of Letters Patent No. 756,189, dated March 29, 1904.

Application filed September 5, 1903. Serial No. 172,160. (No specimens.)

To all whom it may concern:

Be it known that I, WILLIAM BROWNELLE THOMAS, a citizen of the United States, residing at Towns, in the county of Telfair and State of Georgia, have invented certain new and useful Improvements in Artificial Fuel and Processes of Producing Same; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to artificial fuel. Its object is to provide a practical fuel.

To this end it comprises a compound for "rosin-batting" and some such material as sawdust, excelsior, or similar moderately-inflammable and preferably refuse material and the process which I have succeeded in preparing and combining the materials to adapt them for commercial use as a fuel.

In the manufacture of naval stores (turpentine and rosin) after the "spirits of turpentine" are distilled or driven off from the charge in the still there is left behind a residuum of rosin, which when drawn from the still is always strained through thick cotton-batting. After this cotton-batting, now known as "rosin-batting," has been used it is generally burned as waste, burning fiercely and rapidly—too much so, in fact, to be of any practical service as a fuel. In a short time this rosin-batting becomes solid, so that it may be pulverized, and that is the first step in the process of compounding it with some such slow-burning material as sawdust. The mixture may be in equal parts or may have the proportions varied, depending upon the degree of combustibility desired, an increase of the pulverized batting making it more combustible and additional sawdust or other like refuse making it less combustible. After the

ingredients are mixed I have found it essential to the proper fixing and relative distribution of the constituents to heat the compound thoroughly, so that the pulverized rosin-batting may be fused and with the sawdust or other similar or analogous material form a plastic mass, which while warm may be molded or may be placed in molds and heated and which will in cooling retain the shape given it, as of a briquette or other form.

While I have mentioned sawdust as an example of a woody material which may be commingled with the pulverized rosin-batting, I have also indicated that other similar analogous material may be employed, and it will be apparent that my process enables the disposition of not only the residuum of the distillation of wood, but also the other wastes common to lumbering or incidental to the manufacture of rosin and turpentine, &c.

If other material, such as excelsior or chopped straw, be used, it will be found expedient to choose a medium either pulverized or well broken or shredded to more readily admit of preliminary mixing before the treatment by heating.

Having fully described my invention, what I claim is—

The process of producing an artificial fuel from the residuum known as "rosin-batting," which consists in pulverizing the rosin-batting, then mixing it with some less inflammable but combustible material, as some woody refuse or fiber, then heating and molding in any desired order.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM BROWNELLE THOMAS.

Witnesses:

GUY A. CARSWELL,
JOSEPH W. CAMERON.