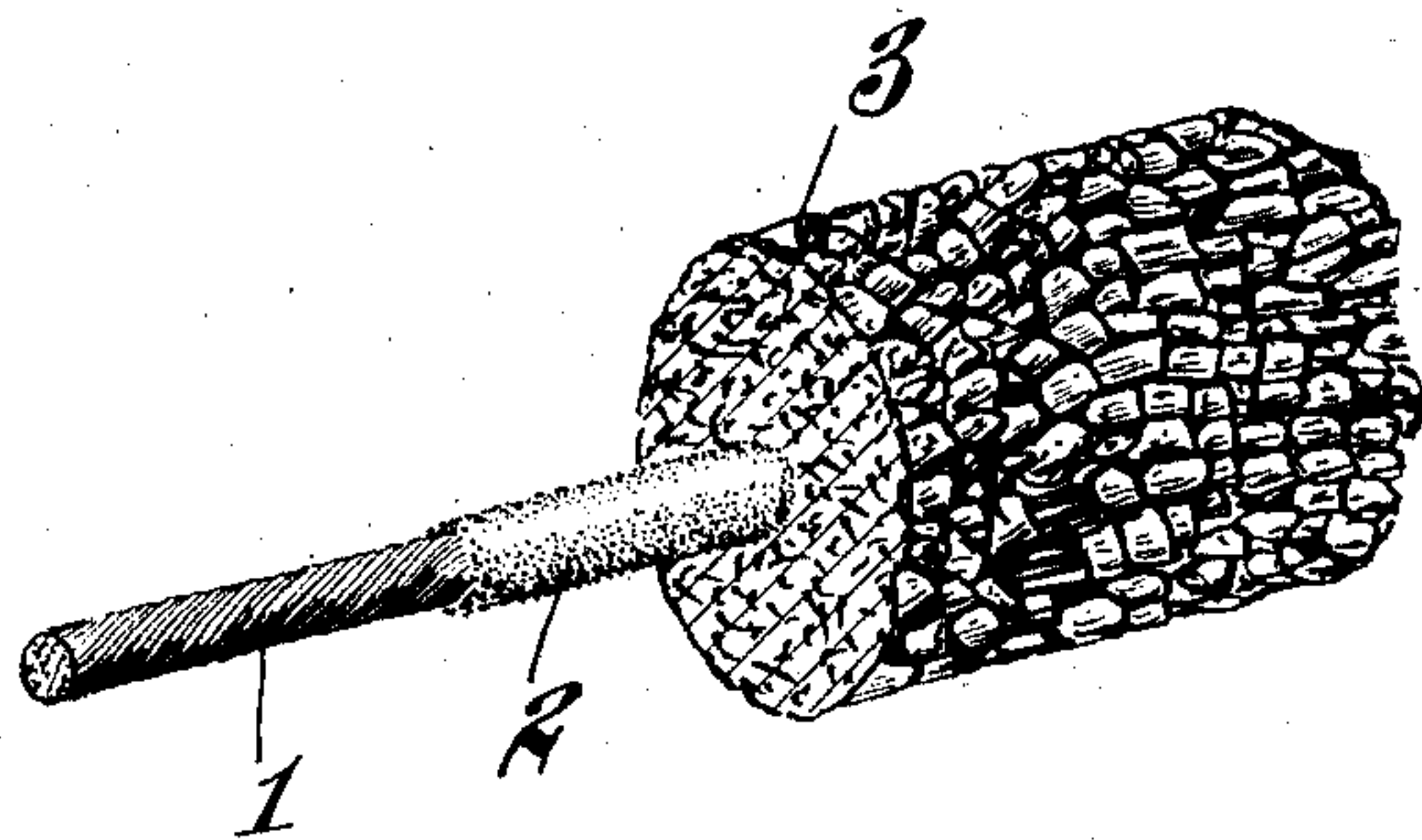


No. 864,525.

PATENTED AUG. 27, 1907.

I. FOREMAN & J. L. THORNTON.
PROCESS OF MANUFACTURING ARTIFICIAL FUEL.
APPLICATION FILED JULY 2, 1906.



Witnesses
Edmund G. Starnes
Wm H. Buckelew

Inventors
I. Foreman
John L. Thornton
By *Hazard & Morpham*
Attorneys

UNITED STATES PATENT OFFICE.

IRA FOREMAN AND JOHN L. THORNTON, OF LOS ANGELES, CALIFORNIA.

PROCESS OF MANUFACTURING ARTIFICIAL FUEL.

No. 864,525.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed July 2, 1906. Serial No. 324,510.

To all whom it may concern:

Be it known that we, IRA FOREMAN and JOHN L. THORNTON, both citizens of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Processes of Manufacturing Artificial Fuel, of which the following is a specification.

The object of the invention is to produce a stick of artificial fuel chiefly from waste products, one which can be easily handled, which will not deteriorate or lose its shape before it is used, and which will burn freely and serve in the best possible manner the purpose for which such fuel is intended.

In the process of manufacturing artificial fuel we prefer to take a small rope or large cord of fiber 1, such as cotton, hemp or jute which forms the core, and saturate it with an inflammable sticky substance, such as heavy crude oil which also forms a coating 2 on the rope. Around the core is compressed the main body 3 of the fuel which consists of any comminuted inflammable material, such as shavings from a planing mill or sawdust or coal-dust or other like material. When the material is fine like sawdust or coal-dust it is preferably mixed with a suitable quantity of heavy crude oil or other inflammable sticky material. We have found in practice that planing mill shavings do not require a bond of crude oil but will retain their form when a pressure of at least 200 pounds to the square inch is placed

thereon in the process of manufacture. Fuel thus prepared is formed into sticks the size of small stove wood by cutting the same into suitable lengths as the fuel passes out of the machine in which the outside material is compressed upon the core.

What we claim is:—

1. The herein described method of manufacturing artificial fuel which consists in first saturating a core of filamentous inflammable material with a hydrocarbon; second, in forming a coating of similar substance on said core; third, in forming a body portion of soft wood shavings around said core and coating; and finally in subjecting said body portion to a pressure of at least 200 pounds to the square inch, whereby a compact article of manufacture is produced.

2. The herein described method of manufacturing artificial fuel which consists in first saturating a core of filamentous inflammable material with oil; second, in forming a coating of similar substance on said core; third, in forming a body portion, of finely divided inflammable material, around said core and coating, and finally in subjecting said body portion to a pressure of at least 200 pounds to the square inch, whereby a compact article of manufacture is produced.

In witness that we claim the foregoing we have hereunto subscribed our names this 25 day of June, 1906.

IRA FOREMAN.
JOHN L. THORNTON.

Witnesses:

G. E. HARPAM,
EDMUND A. STRAUSE.