

Specification of Robert Barbor : manufacture of artificial fuel.

Contributors

Barbor, Robert.

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A.D. 1850 N° 12,932.

S P E C I F I C A T I O N

OF

ROBERT BARBOR.

—
MANUFACTURE OF ARTIFICIAL FUEL.
—

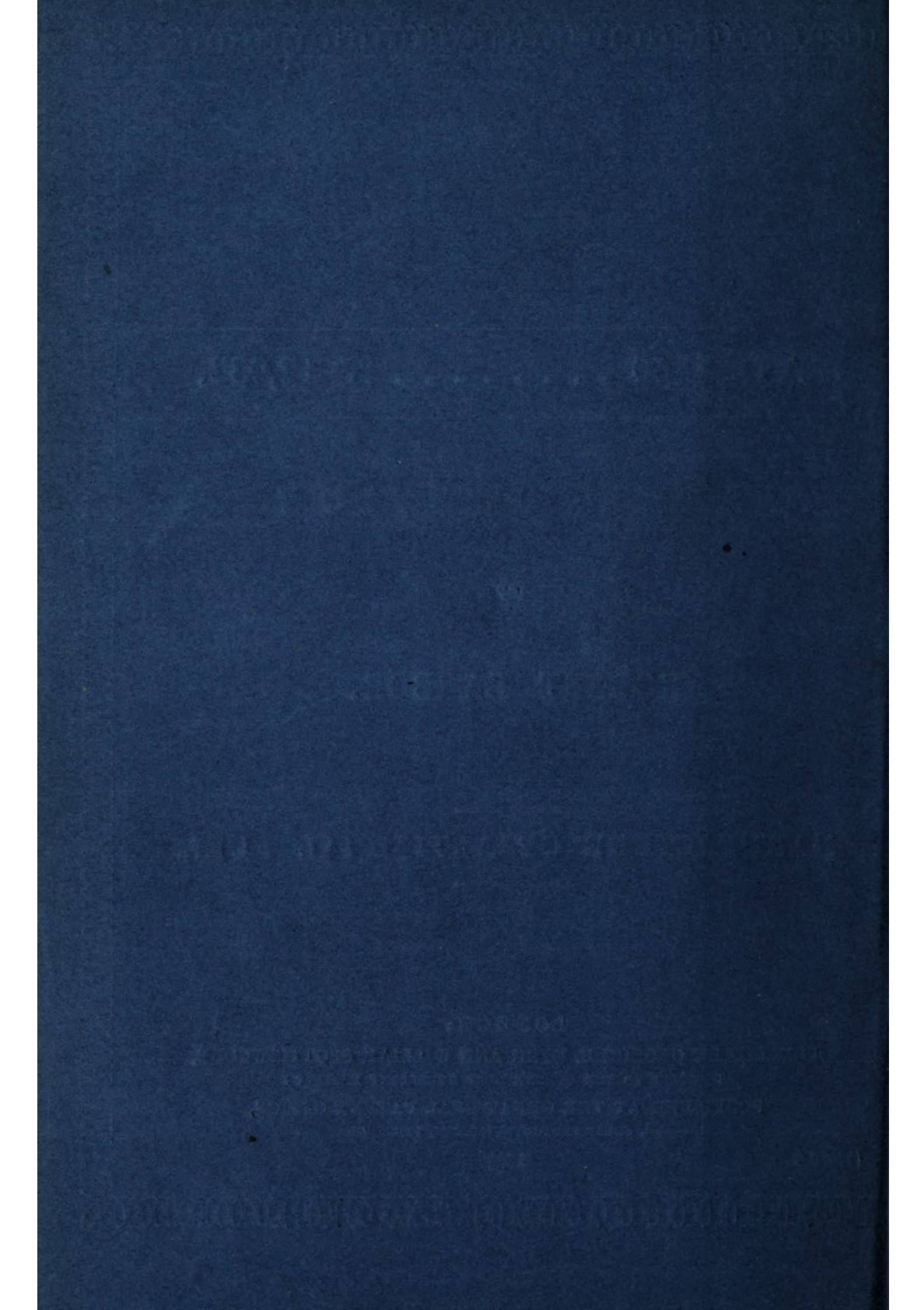
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A.D. 1850 N° 12,932.

Manufacture of Artificial Fuel.

BARBOR'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, ROBERT BARBOR, of Chatham Place, Locks Fields, in the County of Surrey, Metal Smelter, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her
5 Royal Letters Patent under the Great Seal of Great Britain, bearing date at Westminster, the Eighteenth day of January, in the Thirteenth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said Robert Barbor, my eñors, adñiors and assigns, Her especial licence, full power, sole privilege and authority, that the said
10 Robert Barbor, my eñors, adñiors, or assigns, or such others as I, the said Robert Barbor, my eñors, adñiors, or assigns, should at any time agree with, and no others, from time to time and at all times during the term of years therein mentioned, should and lawfully might make, use, exercise, and vend, within England, Wales, and the Town of Berwick-upon-Tweed, my
15 Invention for "CERTAIN IMPROVEMENTS IN ARTIFICIAL FUEL, AND IN MACHINERY USED FOR MANUFACTURING THE SAME;" in which said Letters Patent there is contained a proviso, that I, the said Robert Barbor, shall particularly describe and ascertain the nature of my said Invention, and in what manner the same is to be performed, by an instrument in writing under my hand
20 and seal, to be inrolled in Her said Majesty's High Court of Chancery within six calendar months next and immediately after the date of the said

Barbor's Improvements in Artificial Fuel, &c.

in part recited Letters Patent, as in and by the same, reference being thereunto had, will more fully and at large appear.

NOW KNOW YE, that in compliance with the said proviso, I, the said Robert Barbor, do hereby declare that the nature of my said Invention, and the manner in which the same is to be performed, are fully described 5 and ascertained in and by the following description thereof, reference being had to the Drawings hereunto annexed, and to the figures and letters marked thereon, that is to say:—

My Invention, which relates to certain improvements in the preparation of artificial fuel, and in machinery for manufacturing the same, consists,— 10

Firstly, in the methods or methods of submitting tan bark, commonly known as tan, to various processes, so as to produce, when combined with resin oil, a cheap and convenient fuel for the purpose of lighting or kindling fires. I would remark, before proceeding to describe the leading features of this my said Invention, that I am aware artificial fuel, composed wholly or partly 15 of tan, peat turf, and other like vegetable substances, has before been prepared for various purposes, with numerous hydro-carbons held in combination with them by saturation or otherwise. It is my intention, therefore, to confine myself to the employment of common tan and resin oil, and to the treatment of such compounds, by which process of manufacture a saving of much time and 20 expense is obtained.

That my Invention may be clearly understood, I will now proceed more fully to describe the same.

Firstly, the tan or bark to be prepared is submitted to a bruising or crushing process, for the purpose of separating the fibrous and other particles of 25 which it is composed, and rendering it easier for moulding and manufacturing into fuel. This, in practice, I prefer doing by exposing the tan, previously moistened with water or other liquids, to be continually trodden down by the feet of a horse, which operation reduces the tan to a proper pulpy consistency. The tan so prepared has then to be formed whilst in a plastic or 30 pulpy state into blocks or cakes of convenient size, and allowed gradually to dry in the open air, until the particles of which they are composed become sufficiently hardened and porous to absorb readily any proportionate quantities of resin oil. The next process for completing the manufacture of the artificial fuel, as above described, consists in dipping the blocks or cakes 35 aforesaid (by means of an open worked basket or wire frame) into the resin oil, in a highly heated state, until thoroughly saturated therewith. The unabsorbed carbonaceous matter is then allowed to drain, and the blocks or cakes, when dried by exposure to the air, are fit for use.

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Secondly, my Invention relates to the manufacture of artificial fuel from common tan and resin, the said compounds being worked together in a dry and unprepared state; that is to say, "I cause common tan and resin to be placed in any convenient vessel or copper, heated by steam or otherwise, until
5 the temperature is sufficiently raised to melt the resin. The two ingredients are then well stirred together until completely amalgamated, when they are taken out in a warm state, and placed in moulds or shapes, and become, when cold, hardened, firmly cemented together, and ready for use.

My Invention which relates, thirdly and lastly, to improvements in ma-
10 chinery for moulding and compressing artificial fuel, consists in the outer and inner surfaces of moulds or dies being coated with enamel, whereby great inconvenience, hitherto experienced in such machinery, by the adhering of all viscous substances to the sides of the moulds, is prevented. Among the various contrivances made use of for removing the adhesive particles of fuel
15 which cling to the dies or moulds, the practice of scraping may be mentioned as one of the most recent; yet in certain cases, when raised or figured surfaces are required in place of other designs, my Invention of employing the said enamelled dies and moulds, as above described, will be found much more desirable.

20 Having now described the nature of my Invention, and in what manner the same is to be performed, I declare it to be my intention not to confine myself to the precise details herein-before mentioned, so long as the peculiar character thereof be retained. And I further declare that the several ingredients or combinations of materials of which the said fuel is composed may be
25 formed or moulded as readily by hand as by any other known means, without departing from the character of this my said Invention. I claim,—

Firstly, the treatment of common tan and resin oil as above described, when employed for the purposes of artificial fuel.

Secondly, the manufacture of the said fuel from common tan and resin in an
30 unprepared state, as described under the second head of my Invention. And,

Thirdly and lastly, improvements in machinery which consist in the employment of enamel dies or moulds for manufacturing artificial fuel into blocks or cakes as aforesaid.

In witness whereof, I, the said Robert Barbor, have hereunto set my
35 hand and seal, this Sixteenth day of July, in the year of our Lord One thousand eight hundred and fifty.

ROBERT (L.S.) BARBOR.

Barbor's Improvements in Artificial Fuel, &c.

DREW.

AND BE IT REMEMBERED, that on the Eighteenth day of July, in the year of our Lord 1850, the aforesaid Robert Barbor came before our said Lady the Queen in Her Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained and specified, in form above written. And also the Specification aforesaid was stamped according to the 5 tenor of the Statute made for that purpose.

Enrolled the Eighteenth day of July, in the year of our Lord One thousand eight hundred and fifty.

LONDON :

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