

UNITED STATES PATENT OFFICE.

HANSP HANSEN, OF CHRISTIANIA, NORWAY.

MANUFACTURE OF FUEL-BLOCKS FROM PETROLEUM.

SPECIFICATION forming part of Letters Patent No. 594,739, dated November 30, 1897.

Application filed May 28, 1897. Serial No. 638,541. (No specimens.)

To all whom it may concern:

Be it known that I, HANSP HANSEN, a citizen of Norway, residing at Christiania, Norway, but at present at No. 46 Finsbury Circus, in the city of London, England, have invented certain new and useful Improvements in the Manufacture of Fuel-Blocks from Petroleum, of which the following is a specification.

10 This invention relates to the manufacture of fuel-blocks, which is effected by combining the following ingredients: Seventy-five to eighty-five per cent., by weight, of refined petroleum; four to three per cent., by weight, of caustic soda; thirteen to eight per cent., by weight, of thick turpentine; five to two per cent., by weight, of pine-resin; two and one-half to two per cent., by weight, of margarin, and one-half to one-fifth per cent., by weight, of cocoanut-oil. The proportions may be varied within the limits above stated. The margarin, cocoanut-oil, and about one-third part of the caustic soda in solution of about 38° Baumé are made into soap, which is well dried and divided into granules. The turpentine and pine or gallipot resin are melted together and mixed with the soap-granules. When these are well mixed, the petroleum is added and the mixture is heated to about 105° centigrade. The rest of the alkali in solution is then poured in, and the whole is continually stirred by hand or mechanically until it attains the consistence of porridge. The mixture is kept at a temperature of 100° centigrade until it becomes quite thick, and then

the temperature is raised to about 105° centigrade and maintained at that degree for about an hour. The material is then molded in large blocks or slabs, which after cooling during about two days can be cut into smaller blocks for use as fuel or for lighting fires.

Having now particularly described and ascertained the nature of this invention and the best means I know for carrying the same into practical effect, I claim—

1. The herein-described composition of matter for forming a fuel-block, consisting of petroleum, caustic soda, turpentine, pine-resin, margarin and cocoanut-oil, combined substantially in the proportions and the manner specified.

2. The method herein described of preparing artificial fuel-blocks, consisting in first making a soap of margarin, cocoanut-oil and caustic soda, drying and granulating the soap, then mixing therewith melted turpentine and resin, then adding petroleum, then heating and stirring the entire mixture with the further addition of caustic soda, and finally molding the mass into blocks, substantially in the manner and in the proportions specified.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 15th day of May, A. D. 1897.

HANSP HANSEN.

Witnesses:

S. M. HOHN,

W. J. NORWOOD.