

UNITED STATES PATENT OFFICE.

WM. BUDD AND J. L. HUSBAND, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVED ARTIFICIAL FUEL.

Specification forming part of Letters Patent No. 43,475, dated July 12, 1864.

To all whom it may concern:

Be it known that we, WM. BUDD and J. L. HUSBAND, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and Improved Mode of Using Oils (rock-oil, coal-oil, petroleum, or the residue of all or either) as a Portable Fuel, of which the following is a specification.

The nature of our invention consists in impregnating corn-cobs with oil.

To enable others skilled in the art to make for use our invention, we will proceed to describe its combination, construction, and operation.

We piece the corn-cobs, cut the stumps or large end of the corn-cobs, and expose the pulp or pith of them. If perfectly dry, the corn-cobs may then be packed in barrels, for instance. Then pour the oil upon them from time to time in a thoroughly fluid state until the cobs have been fully impregnated, which

they will be in about seventy-two hours, if kept at a temperature of some 60°. The corn-cob will absorb one hundred and fifty per cent. of its weight in oil, and retain it, less some five per cent., if exposed to a drying wind.

The oil fuel so made will be perfectly portable and have less injurious effect upon fire-surfaces than any other pieced fuel. The corn-cob itself, weight for weight, has more caloric than any other fuel, and, impregnated with oil, will form the most valuable locomotive fuel extant.

What we claim as our invention, and desire to secure by Letters Patent, is—

The impregnating of corn-cobs with oil, as hereinbefore more fully set forth.

WILLIAM BUDD.
J. L. HUSBAND.

Witnesses:

WM. A. HUSBAND,
H. TUNYAN.