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FLOCCULATED FUEL COMPOUND.

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The invention relates to a flocculated compounded fuel.

The object of the present invention is to improve the construction of fuel compounds and to provide a compounded fuel adapted to be easily handled and capable of being burned on a flat fire-proof surface and thereby obviate the necessity of providing grate structures and at the same time enabling the compounded fuel to be manufactured in as finely pulverized condition as desired without the loss of fuel which would result were such fuel compound burned upon a grate structure.

A further object of the invention is to provide a compounded fuel of this character which will be approximately 99% combustible and produce practically a perfect combustion without ashes, clinkers or cinders.

Another object of the invention is to provide a compounded flocculated fuel adapted for both domestic and manufacturing purposes and capable when burned in furnaces and other heating and cooking apparatus for domestic purposes of having the comparatively small residue carried or floated away in practically imperceptible particles to the chimney or flue.

The compounded flocculated fuel consists of the following ingredients:

	Per cent.
Graphite	13.
Coke	4.50
Limestone	7.50
Soft coal	75.

Hard coal may be substituted for the soft coal or a mixture of hard and soft coal may be used instead of soft or hard coal. In preparing the fuel mixture the ingredients are finely pulverized and thoroughly mixed together, and as the compounded fuel may be burned on any flat fire-proof surface, the said ingredients may be pulverized as finely as desired, as a grate structure is unnecessary and there is no liability of loss of material through the openings between the grate bars in a grate structure. The fuel may be employed for all purposes either as a domestic fuel or for manufacturing purposes. When the fuel is burned in a domestic furnace or analogous heating apparatus, the fuel may be fed to the fire box or fire pot in any desired manner and the residue will float off in almost imperceptible particles, it being preferably desirable to employ a relatively small fan driven at a comparatively low speed for effecting this result.

The limestone of the compounded fuel is a rock having carbonate of lime as its basis highly charged with carbon, which will burn after the limestone is pulverized to a fineness sufficient to release the carbon content from the other components of the rock. This will leave the carbon free to burn as fuel.

The flake graphite of the compounded fuel is pure carbon, and when finely pulverized it will ignite and produce either a high or low constant temperature, as required. All the carbon or heat units contained in the flocculated fuel are burned, and even the carbon contained in the slate of coal may be burned, which is a great saving to the consumer of fuel. The fuel compound absolutely delivers all of the heat units to the fire box and nothing is lost. It is practically a perfectly compounded fuel which may be pulverized to any desired degree of fineness, and it may be completely controlled both as to the feeding of the compounded fuel to the fire box and the combustion of the fuel within the fire box.

What is claimed is:—

1. A flocculated compounded fuel comprising graphite, coke, limestone and coal.

2. A flocculated fuel compound comprising finely pulverized graphite, coke, limestone and coal.

3. A flocculated fuel compound comprising finely pulverized graphite, coke, limestone and soft coal in substantially the proportions stated.

In testimony whereof I have hereunto set my hand.

JOHN JAY TONKIN.