April 29, 1941. A. R. KEIL 2,240,335

FUEL AND FUEL PACKAGE

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Fig. 1

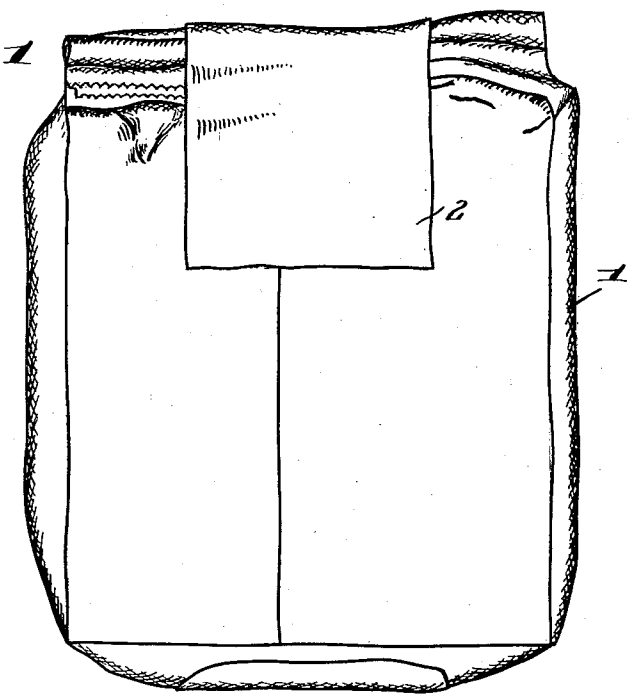
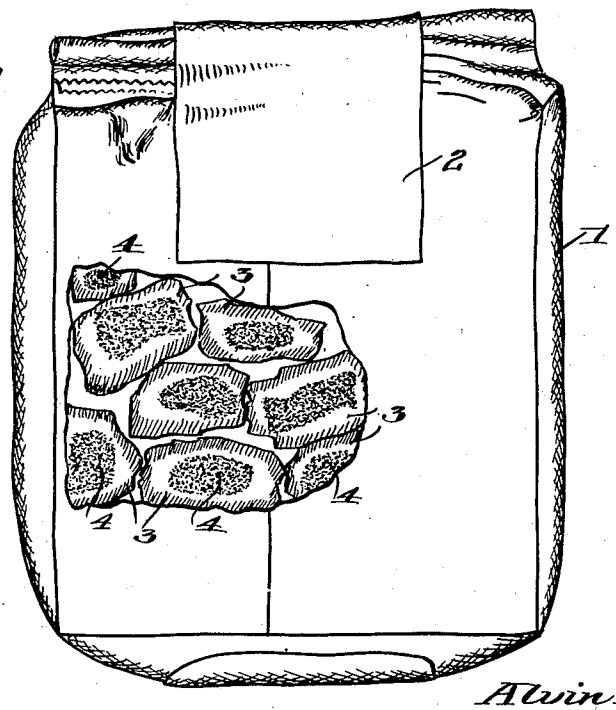


Fig. 2



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FUEL AND FUEL PACKAGE

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Application November 29, 1938, Serial No. 242,973

1 Claim. (Cl. 44—40)

This invention relates to a fuel and fuel package, with reference more particularly to charcoal, and it has for its object to prepare charcoal so that it can be used successfully for starting more quickly than heretofore a furnace or boiler fire, or as a broiler fire out of doors, and which is cleaner to handle and can be merchandised in convenient packages that need not be opened.

The combustion qualities of charcoal are well known, and one obstacle to its more general use is the difficulty in starting it to burn, and it is a particular purpose of this invention to treat charcoal in such fashion that it will ignite quickly and without the aid of paper, wood, or other kindling facilities such as heretofore employed.

A further purpose of the invention is to afford a charcoal treated so as to reduce the amount of dust, and to package it in a sealed or closed container which is clean to handle, and requires only when ready for use that the paper container be ignited before placing the package on the grate where the fire is to be built.

Another object of the invention is to afford a fuel package with charcoal as its base, treated with a slow-burning substance that ignites more readily than the charcoal, and will burn freely enough to ignite the charcoal in a short time, but which at the same time is non-explosive and free from danger of spontaneous combustion, thus making the package as safe to handle and ship as the ordinary charcoal.

To these and other ends, the invention consists in the construction and arrangement of parts that will appear clearly from the following description when read in conjunction with the accompanying drawing, the novel features being pointed out in the claims following the specification.

In the drawing:

Fig. 1 is a side elevation of a fuel package prepared in accordance with the invention, and

Fig. 2 is a sectional view of the same.

In carrying out the invention, I proceed by treating lump charcoal of the size ordinarily employed for fuel purposes, or of any suitable or convenient size, so that it is provided with a slow-burning and non-explosive substance preferably of an adhesive character, which ignites more readily than the charcoal and quickly kindles it.

One material that I have found thus far to be well adapted to this purpose is wax, or paraffin, although it is possible that other substances may be utilized, and the wax or other material is applied to the surface of the charcoal in any convenient way. Preferably this is accomplished by moving the lumps of charcoal along on a traveling conveyor and subjecting the same to a spray of paraffin or liquid wax which quickly attaches itself to the surface of the charcoal and hardens thereon.

It is not necessary that the lumbs of charcoal be entirely or substantially coated, or that every lump carry wax, but it is sufficient if the wax is spotted on the surfaces of the charcoal lumps in sufficient quantity and extent to effect quick and continuous burning throughout the mass and thereby fully ignite the charcoal. While the chief function of the wax is to kindle the charcoal easily, quickly, and uniformly, it has the further advantage of covering portion of the charcoal surfaces to which it adheres, and to this extent allaying a certain amount of charcoal dust, making it somewhat cleaner to handle and package.

The charcoal is packaged within a container 1 of paper or other suitable readily combustible material, which is suitably sealed at 2, or otherwise closed, to keep any dust inside the container and maintain the exterior of the package clean for handling. 3 designate the charcoal lumps which are coated as at 4 at portions of their surfaces with the material such as wax that ignites more readily than charcoal and serves as a kindling agent for the latter.

In using such a package, it is necessary only to apply a lighted match to the container 1, which as soon as it is ignited, is placed on the grate where the fire is to be built. No kindling fuel in the form of wood or other material is required, and at the end of a few minutes, the burning wax ignites the entire charcoal mass and brings it to a red heat, ready to have coal applied when it is employed for kindling a furnace or boiler fire, and ready to broil when used in an outdoor broiler.

Owing to the fact that the wax is distributed more or less evenly throughout the entire charcoal mass, and ignites quickly while burning somewhat slowly, the charcoal is brought into a uniform state of combustion in but a few minutes, thus requiring less charcoal than where ignited in the usual fashion.

Another advantage of the invention is that excessive smoke or fumes are eliminated as where wood and other kindling materials are used, the amount of smoke from the burning wax being reduced to a minimum by using only enough wax to effect quick ignition of the char-

coal. This is of definite advantage where charcoal is used for broiling meats or cooking food that is exposed directly to the products of combustion, in which case it is desirable that the food be subjected as little as possible to any products of combustion other than from the charcoal itself.

While the invention has been described with reference to one particular embodiment, it is not necessarily confined to the present disclosure, and this application is intended to cover any other adaptations coming within the purposes of the invention or the scope of the following claim.

I claim:

A fuel package comprising a closed container of readily combustible material such as paper packed with lumbs of charcoal having particles of wax affixed to relatively small portions of the surfaces of the lumps of charcoal, said wax acting to effect the ignition of the charcoal, the remaining portions of the surfaces and the body portions of the lumps of charcoal being free from wax.

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