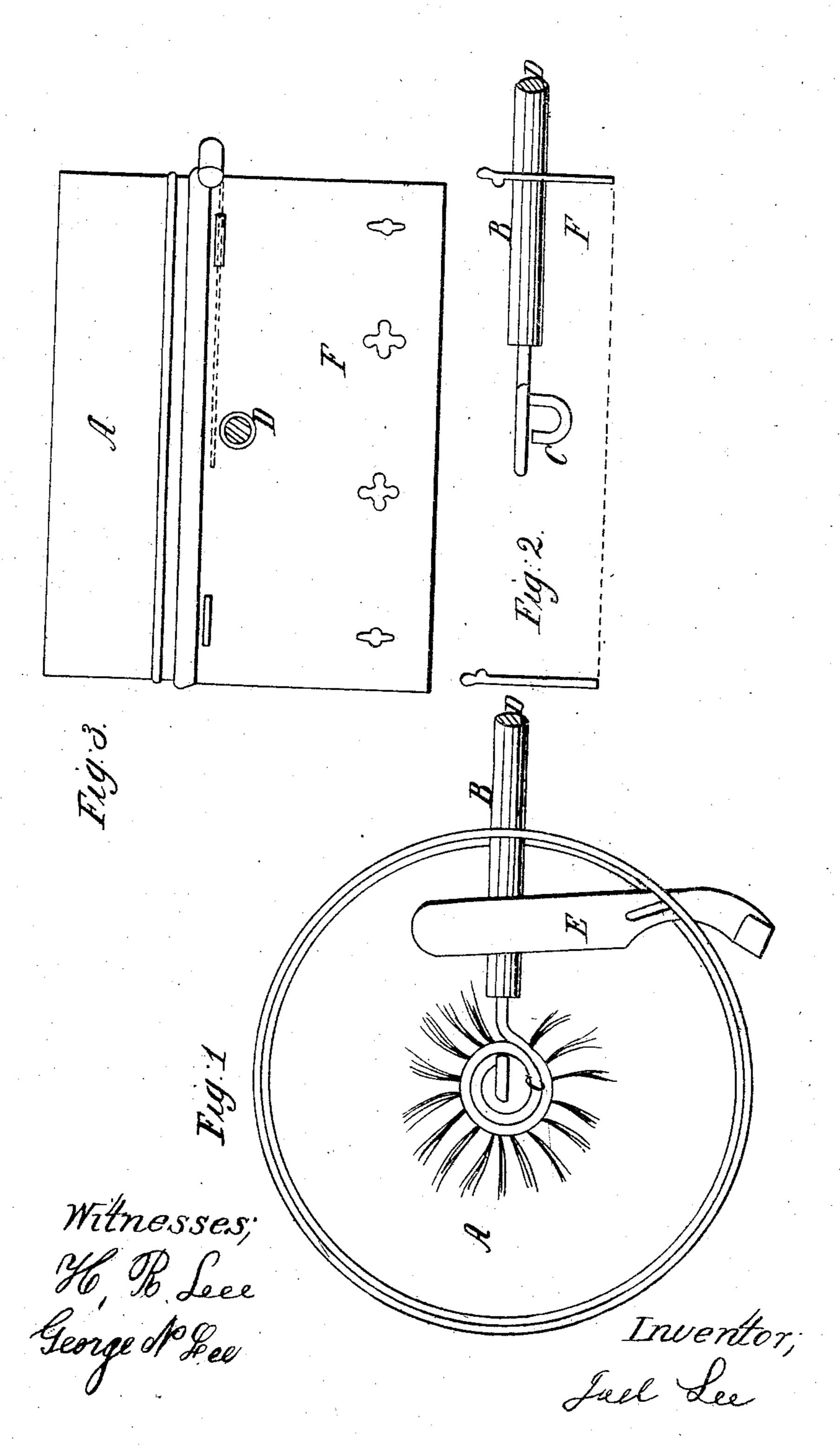
J. LEE.
PETROLEUM STOVE.



Anited States Patent Pffice

JOEL LEE, OF GALESBURG, ILLINOIS.

Letters Patent No. 63,400, dated April 2, 1867.

PETROLEUM STOVE.

The Schedule referred to in these Petters Patent and making part of the same.

Be it known that I, Joel Lee, of Galesburg, county of Knox, and State of Illinois, have invented a new and useful Improvement in Petroleum Stoves; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is top view.

Figure 2 is a sectional view of conducting tube and gas generator.

Figure 3 is a perspective view.

A represents a cooking vessel; B the conducting tube; C the gas generator; D the packing; E the flame

protector; F the stove or foundation for the cooking vessel.

The nature of my invention consists in packing the conducting tube with wood of a porous nature; also in using a coiled tube for a gas generator, and using the cooking vessel for a radiator. The conducting tube is packed with wood of a porous nature, such as elm, lynn, ash, grape-vine, or any other wood of a porous nature. The wood is nicely fitted and driven in tight, so that the fluid being used shall pass through the pores of the wood only; this serves a double purpose of preventing the oil from rushing into the gas generator too fast and preventing any impurities passing into the gas generator, and when the wood becomes elogged it can be very easily replaced with a new piece. The conducting tube should be made so that it can be detached from the gas generator for the convenience of replacing the wood. The gas generator is formed of a coiled tube which may have one or more coils, the inside coil always heating the hottest as the gas becomes heated to some extent before reaching the inside coil, thereby evolving gas more readily and perfectly than when passed through a straight pipe. The conducting tube serves to conduct the petroleum, kerosene, benzole, benzine, or gasoline, or any other light oil being used, from a hollow tube that supports the elevated tank which is in common use. The constant flow of liquid may be shut off by a faucet or any other well-known modes.

To use my invention, turn the flame protector over the point where the jet of gas flows; then with a lighted taper apply heat to the coiled gas generator, until it is sufficiently heated to evolve gas; then turn on the fluid being used, and the same flame that heats the gas generator will ignite the gas, when the lighted taper is withdrawn and the stove is ready for use. Place the cooking vessel in its proper place and then turn the flame protector away from the flame; in this position the vessel acts as a radiator, spreading the flame in every direction under the bottom of the vessel, and over the gas generator, and passing out of the slots near the top of the stove. The cold air is supplied through the holes near the bottom of the stove. The flame protector must be turned over the flame at all times when the vessels are changed, or the flame will go out. Thus it will be seen that the heat is all applied to the cooking vessel without the loss of heat, as is the case when a radiator is used.

What I claim as my invention, and desire to secure by Letters Patent, is as follows:

1. Packing the conducting tube with wood, in the manner and for the purpose set forth.

2. A gas generator made of a coiled tube to encircle the jet of gas, the lower point being turned so as to allow the gas to flow through the centre of the circle and burn against the bottom of the cooking vessel, substantially as set forth.

Witnesses:

H. R. LEE, GEORGE N. LEE. JOEL LEE.