

UNITED STATES PATENT OFFICE.

BENJAMIN H. CHADBURN, OF ST. LOUIS, MISSOURI.

IMPROVED BURNING-FLUID.

Specification forming part of Letters Patent No. **59,182**, dated October 30, 1866.

To all whom it may concern:

Be it known that I, BENJAMIN H. CHADBURN, of the city of St. Louis, in the county of St. Louis and State of Missouri, have invented an Improved Burning-Fluid, which I denominate and call "Petrolene Fluid;" and I do hereby declare the following to be a full, clear, and exact description of the same and the process of manufacturing it.

From a barrel of forty-two gallons of naphtha of sixty-five gravity I draw about four gallons, into which I put one-half pound of hemlock-bark, one-half pound flaxseed, one and one-half pound white-oak bark, two pounds alkanet-root, and one and one-half pound rock-salt. I let this steep for eight hours, and then strain it through two thicknesses of woolen flannel into the barrel from which it was taken. I also put one and one-half ounce of niter, one ounce of camphor-gum, two ounces of borax, and one pint alcohol into a bottle and let it stand eight hours, shaking it well once in two hours. I then pour the contents of the bottle through the same strainer into the barrel, and the petrolene fluid is ready for use.

My petrolene fluid is the safest and most economical and perfect burning-fluid in use.

The flaxseed gives body to the naphtha without any oily or dirty properties. The hemlock and oak barks also give body to the fluid, and, assisted by the salt, niter, and borax, entirely destroy the dangerous and explosive qualities of the naphtha without injuring its burn-

ing qualities. The alkanet-root also helps to give the fluid body and substance, and gives it the beautiful red color which is so highly prized by those who use it in their lamps. The camphor-gum destroys all offensive odor of the naphtha when burning, and, combined with the niter and borax, prevents any smoke, and gives a softness and purity of light unequalled by any fluid or oil used for illuminating purposes. The alcohol also serves to increase the purity and brilliancy of the light, and to dissolve the other ingredients used.

The petrolene fluid can be manufactured, as above named, at a cost of at least thirty-three per cent. less than coal-oil, and will burn ten per cent. longer, giving the same amount of light, or, by burning the same quantity, will give ten per cent. more light than any other oil or fluid used.

The petrolene fluid burns beautifully in the common lamp with fluid-tubes without a chimney, and will not smoke or emit any offensive odor when so used.

I claim as new and entitled to a patent—

The combination of the ingredients herein described.

In witness whereof I have signed my name to this specification in presence of two subscribing witnesses.

BENJAMIN H. CHADBURN.

Witnesses:

EDM. F. BROWN,
BENJ. AUSTIN.