

# United States Patent Office.

HENRY C. DEWITT, OF ST. LOUIS, MISSOURI.

*Letters Patent No. 63,229, dated March 26, 1867.*

## IMPROVED BURNING-OIL.

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

*To all whom it may concern:*

Be it known that I, H. C. DEWITT, of the city and county of St. Louis and State of Missouri, have invented a new and useful Improvement in Burning or Illuminating-oil, which I designate as Aurora Oil; and I do hereby declare that the following is a full and clear description thereof, which will enable those skilled in the art to make and use my improved oil.

As the body of the said oil, I take the product of coal oil known as gasoline, which, from its exceedingly volatile and explosive nature, is now nearly or quite, commercially, worthless. The whole of the ingredients used, and the proportions in which they are united to form the desired product in several different forms, may be briefly summed up as follows. Each of the ingredients I will designate by letters of the alphabet for convenience:

Letter A stands for gasoline, of which the proportion is about forty gallons.

Letter B stands for powdered alum, of which the proportion is about four pounds.

Letter C stands for cut potatoes, of which the proportion is about two quarts.

Letter D stands for pure carbon oil, of which the proportion is about two gallons.

Letter E stands for alcohol, of which the proportion is about one quart.

Letter F stands for gum-camphor, of which the proportion is about two ounces.

Letter G stands for oil of sassafras, of which the proportion is about eight ounces.

Letter H stands for acetic potash, of which the proportion is about one pound.

Letter I stands for sal soda, of which the proportion is about two pounds.

The mode of manufacturing the new illuminating oil is as follows:

I take the ingredients, A, forty gallons of gasoline; B, four pounds of powdered alum; C, two quarts of

common potatoes, cut fine, and mix them in an open-topped vessel, and let them stand for two or three days, during which time the explosive and volatile nature of the gasoline will pass off harmlessly, and without perceptibly diminishing the bulk or quantity of the liquid.

To now properly prepare the said mixture, I add thereto the ingredients severally marked D E F G H and I, in the proportion of measure and weights for each heretofore stated.

In a comparatively short time, say two to eight hours, the clear liquid is ready for use, the same being then of the proper or standard specific gravity, having an aqueous transparency, and giving, when burned in a proper burner, a clear and brilliant white light, of high photometrical quality.

Of said ingredients thus described as being useful to form my said improved burning-fluid, the following are to be deemed as essential: A B C F H and I; and I do therefore insist that these said ingredients, or their chemical equivalents, are especially included in the nature of my invention.

The ingredient E is added to facilitate the solubility of other ingredients; but I do not deem the same necessary, and the ingredient G, or any equivalent essential oil, is used to counteract the odor of certain more volatile carbureted hydrogens, and acts as a deodorizer of the oil.

Having now fully described my said invention,

What I claim is—

1. The mixture formed from and by action of the ingredients A B C F H and I, substantially as set forth and described.

2. The mixture formed from and by action of the ingredients A B C D E F G H and I, substantially as set forth.

H. C. DEWITT.

Witnesses:

M. RANDOLPH,

GEO. P. HERTHEL, Jr.