

# UNITED STATES PATENT OFFICE.

CARLETON ELLIS, OF LARCHMONT, NEW YORK, ASSIGNOR TO ELLIS-FOSTER COMPANY,  
A CORPORATION OF NEW JERSEY.

## METAL-POLISH.

999,491.

Specification of Letters Patent.

Patented Aug. 1, 1911.

No Drawing.

Application filed November 27, 1908. Serial No. 464,672.

*To all whom it may concern:*

Be it known that I, CARLETON ELLIS, a citizen of the United States, residing at Larchmont, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Metal-Polish, of which the following is a specification.

This invention relates to a composition of matter intended for use as a metal polish and relates particularly to a non-inflammable composition comprising a heavy naphtha, such as may be obtained from petroleum or coal tar by suitable distillation and fractionation.

Many of the distillates of petroleum and coal tar such as benzol and stove gasoline are very inflammable and when mixed with a non-inflammable liquid such as carbon tetrachlorid do not make mixtures of a satisfactorily high flash point without the use of excessive amounts of carbon tetrachlorid.

It is the object of my invention to combine the certain distillates or fractions referred to with a small quantity or modicum of carbon tetrachlorid or similar miscible non-inflammable material so as to produce a composition not flashing at ordinary temperatures. For this purpose I make use of the heavy naphtha fraction of coal tar known as solvent naphtha or preferably certain petroleum distillates having flash points of from say 95° to 105° or 110° F. or even higher, employing distillates which have been so thoroughly rectified that there is no substantial amount of kerosene oil present to make a too greasy or too slowly-evaporating mixture.

One of the requisites of a commercial brass polish is that the liquid vehicle must be in the main of a rapidly evaporating character so that the polishing abrasive, which it carries, rapidly becomes dry when applied and exerts a peculiar polishing action during such drying out process which cannot be readily obtained in any other way.

I have found that a very small amount of carbon tetrachlorid will suffice to make the naphtha distillates referred to non-inflammable or of a sufficient degree of non-inflammability so as to be perfectly safe for general use.

A suitable composition involving my invention consists of:—

Solvent naphtha	78	parts	55
Carbon tetrachlorid	10	"	
Amyl acetate	5	"	
Pine oil	3	"	
Lemon grass	1	"	
Red oil	4	"	60
Tripoli	30	"	

Another composition of a somewhat similar character consists of:—

Petroleum distillates flashing at about 105° F	80	parts	65
Carbon tetrachlorid	10	"	
Nitrobenzol	6	"	
Wood turpentine	4	"	
Silex	30	"	70

In the above composition, it will be observed that the carbon tetrachlorid is used only about to the extent of 10% of the entire liquid components. Even less than this will suffice under some circumstances. The stearic acid or red oil is added for the purpose of securing additional detergent and polishing properties, but may be omitted if desired. The material employed in this composition should be preferably entirely free from water and I recommend thoroughly drying the abrasive powder employed before it is used.

It should be understood that I do not wish to limit my invention to the details of the above formulas and embrace in this invention those equivalents which may properly fall into the category indicated.

What I claim is:—

1. A non-inflammable metal polish comprising heavy petroleum naphtha having a

flash point, between 95° and 110° F. with about 10% carbon tetrachlorid and a polishing abrasive, said composition being substantially free from solvent action on surfaces coated with paint and varnish.

3 2. A non-inflammable metal polish, consisting of heavy naphtha, with about 10% of carbon tetrachlorid and a polishing abrasive; said composition being substantially

free from solvent action on surfaces coated 10 with paint and varnish.

In testimony whereof I have affixed my signature in presence of two witnesses.

CARLETON ELLIS.

Witnesses:

NATHANIEL L. FOSTER,  
FRANCES I. NEWMAN.