

UNITED STATES PATENT OFFICE.

WILLIAM AYLING, OF CHICAGO, ILLINOIS, ASSIGNOR TO AYLING BROTHERS, OF SAME PLACE.

STOVE-POLISH.

SPECIFICATION forming part of Letters Patent No. 620,405, dated February 28, 1899.

Application filed August 31, 1898. Serial No. 689,904. (No specimens.)

To all whom it may concern:

Be it known that I, WILLIAM AYLING, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Composition of Matter for Polishing Stoves, (Case No. 3,) of which the following is a specification.

The stove-polishing compound of my invention is a dry powder which is readily converted into a liquid polish by adding either water, benzin, turpentine, or other suitable solvents thereto.

It may be explained that it is highly advantageous in a compound of this class to secure its solution either in water, whereby a non-inflammable liquid polish is obtained, or in benzin, which will result in a thoroughly-waterproof polish. It is also desirable, if not necessary, to obtain a binding material which will prevent the polish from flaking or dusting off when the same is dry. The polish of my invention conforms to these requirements, and when applied to a stove or other metal surface and dried forms a coating in the nature of an enamel which adheres closely to the surface coated and is not injuriously affected by heat.

The stove or metal blackening and polishing compound is composed of the following ingredients, combined in the proportions below stated: graphite, one hundred pounds; bitumen, four pounds, and dried soap, two pounds. To the above preferably is added a sufficient quantity of lamp or gas black to give the desired depth or blackness to the polished stove or other article, an average compound containing lampblack or gas-black twenty-five pounds. The above proportions need not be strictly observed, however, in preparing my compound, since the same may be departed from, according to the qualities desired in the polish. Furthermore, the precise ingredients named may be somewhat varied without affecting the excellence of the compound. For example, rosin may, if desired, be substituted for the bitumen or asphaltum preferably employed in compounding the above formula, or, again, a suitable grease and a positive alkali may be used in the stead of a manufactured soap.

I have used the term "bitumen" through-

out my specification and claims to designate the preferred waterproof binding ingredient employed in my stove-polish, by which I mean the solid or nearly solid bituminous compounds, such as asphaltum and maltha. Obviously in a powder of the character herein described a fluid bitumen, such as petroleum, is not adapted for use, nor is the same contemplated in my present employment of the term "bitumen."

As stated above, my compound is a partially-soluble dry powder, the several ingredients being pulverized or ground to reduce the same to as minute particles as is practicable. Care should also be taken to mix thoroughly the pulverized ingredients of the compound in order to secure the best results. When combined substantially in the proportions set forth above, a composition is obtained which, dissolved in benzin or turpentine, forms a waterproof polish, the asphaltum and soap both being readily soluble therein. The liquid polish thus prepared, moreover, does not dry too quickly, since the soap or grease in said polish serves to retard somewhat the drying of the compound and also facilitates polishing the stove or other article when said compound has dried thereon. This is accomplished in the usual manner by brushing or rubbing briskly for a few moments the surface to be polished. It will be found that the compound when dry has no tendency to flake or dust off the article to which it is applied, and when the same is heated the polish forms an enamel-like covering which is thoroughly waterproof. Some considerations make a non-inflammable polishing liquid more desirable, and accordingly by adding water to my compound the soap and a portion of the bitumen or asphaltum are readily taken up, thus forming a liquid polish which is perfectly safe to work with over hot stoves. This polish, however, does not have the advantage of being thoroughly waterproof, although in other respects its use is practically as advantageous as when benzin is employed as a solvent.

By experiment I have determined that in my compound the cheaper grades of asphaltum are attacked in some degree by the alkali of the soap, and accordingly the asphaltum

is made somewhat soluble and partially goes into solution with the soap when water is added to the compound. This of course depends largely upon the amount of alkali
5 which is present in the compound.

The quantity of liquid which may be added to the compound to form a satisfactory blacking and polish varies greatly; but I recommend a mixture of two quarts of liquid to a
10 pound of my composition. Indeed, the polishing compound above considered may be used in a dry state, if desired, although with less satisfactory results.

The compound above described is not injured by standing any length of time, since all volatile ingredients are avoided in its preparation. In addition, it being in powdered form is most convenient to use and dissolves readily to form the liquid polish.

20 I do not desire to be understood as claiming as novel the use of any specific ingredient in a stove-polishing compound; but I am not aware that a stove-polishing powder capable of ready conversion into a liquid polish by
25 the addition of water or benzin or having the combination of ingredients herein set forth has previously been prepared.

Having now specified the composition of matter of my invention and set forth in brief

its advantages and utilities, what I claim, and
30 desire to secure by Letters Patent, is—

1. The herein-described powder for making liquid stove-polish consisting of graphite, bitumen and hard soap, finely divided and intimately mixed, substantially as above stated.
35

2. The herein-described composition of matter for blackening and polishing metal surfaces, consisting of finely-divided graphite, bitumen and dried soap combined substantially in the proportions above recited.
40

3. The herein-described composition of matter for blackening and polishing stoves and the like consisting of pulverized graphite, bitumen, dried soap, and lampblack mixed substantially in the proportions above stated.
45

4. A stove-polishing powder soluble in water, benzin or turpentine, consisting of finely-powdered graphite, bitumen, hard soap and a deposited carbon-black, intimately mixed, substantially as and in the proportions above
50 stated.

In witness whereof I hereunto subscribe my name this 29th day of August, A. D. 1898.

WILLIAM AYLING.

Witnesses:

WINFIELD W. LEACH,
A. L. LAWRENCE.