

# UNITED STATES PATENT OFFICE.

RUDOLF PETERS, OF HEIDELBERG, GERMANY.

## PROCESS FOR UTILIZING WASTE ENDS OF CARBONS FOR ARC-LAMPS.

No. 845,256.

Specification of Letters Patent.

Patented Feb. 26, 1907.

Application filed January 16, 1905. Serial No. 241,392.

*To all whom it may concern:*

Be it known that I, RUDOLF PETERS, a subject of the German Emperor, and a resident of Heidelberg, Germany, have invented certain new and useful Processes for Utilizing the Waste Ends of Carbons for Arc-Lamps, of which the following is a specification.

The present invention relates to a process for the manufacture of more or less coarse commercial colors, putties, tempering-powders, and the like from the waste ends of arc-lamp carbons.

The process consists in that the carbon pieces are strongly dried in a suitable oven, (the best by heating them until calcination is obtained, which is at a temperature of about 1400° centigrade,) then softened by very slow cooling, and then treated in suitable grinding-mills. The product is then passed through very fine sieves, so as to obtain color-powders resembling lampblack. These colors are then mixed in the well-known manner with linseed-oil, arabic gum, neutral wool-grease, and the like.

The coarser colors obtained by the above-described process are particularly convenient for painting station-halls, bridges, ships, traversers, cranes, locomotives, wagons of any kind, parts of machines, pipings for water distribution, and so on.

The slow cooling is effected in a convenient manner, but in any case without chilling, by means of oil.

I would state that the heating of the car-

bon ends is for the purpose of driving off or neutralizing the injurious binding material which is usually present in greater or less quantities in the carbon ends, and usually a temperature of about 100° centigrade is sufficient for this purpose; but I prefer to subject the carbon ends to such a temperature as will always insure the complete elimination of the binding material, and therefore would heat the ends up to the temperature of about 1400° centigrade, at which point complete calcination is effected.

Having now fully described my said invention, what I claim, and desire to secure by Letters Patent, is—

The herein-described process for utilizing the waste ends of carbons from arc-lamps by producing therefrom a product which is adapted for use in the manufacture of colors, putties, &c., which consists in heating the waste ends in suitable ovens up to a temperature not exceeding 1,400° centigrade, then softening said ends by very slow cooling without immersing in linseed-oil, then grinding said ends, passing the ground material through very fine sieves and then mixing linseed-oil with the screened material.

In testimony whereof I have hereunto set my hand in presence of two witnesses.

RUDOLF PETERS.

Witnesses:

H. W. HARRIS,  
JOS. H. LEUTE.