

UNITED STATES PATENT OFFICE.

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ABRADING COMPOUND.

No Drawing.

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To all whom it may concern:

Be it known that I, CHARLES F. STEPHENSON, a citizen of the United States, and a resident of Fostoria, in the county of Seneca and State of Ohio, have invented a new and Improved Abrading Compound, of which the following is a full, clear, and exact description.

The present invention relates to new and useful improvements in abrading and grinding compounds, and it pertains more particularly to a compound especially adapted for grinding bearing metals, such as Babbitt metal and the like.

It is one of the objects of the present invention to provide a grinding compound which while possessed of all the necessary abrading and grinding qualities to successfully act on relatively soft metal, such as Babbitt metal or the like, will not be injurious to working parts of machinery, which working parts are composed of harder metal, such as steel or the like.

It is a further object of the invention to provide a grinding compound the presence of which in the bearing will indicate the high and low spots of the bearing, a suitable coloring being combined with the compound to bring about this effect.

Referring more specifically to the invention, the compound comprises a pulverized abrading powder comprising water 0.90%; volatile matter 6.97%, silica 87.40% and sodium carbonate 3.18% (which compound is known commercially as Sapolio), Venetian red, table salt and laundry bluing. In making the compound, each of these elements is treated separately and each finely pulverized. After the several ingredients have been separately pulverized, they are subjected separately to a screening process in order that none but the finest particles thereof may be used.

After the several ingredients have been treated as above described, they are mixed together to form a bulk and subjected to a suitable mixing operation preferably by mechanical means, after which the resultant compound is thoroughly sifted.

It has been found by experiment that the following proportions form a compound particularly adapted to accomplish the desired result:

Pulverized abrading powder	50 pounds.	55
Venetian red	3 "	
Table salt	2 "	
Powdered laundry bluing	$\frac{1}{2}$ "	

The properties of the several ingredients are as follows: The powdered abrading material has a grinding quality suited to Babbitt and the softer metals commonly used for bearings. It has also been found that this material does not affect harder metals such as steel and iron parts. The Venetian red has some grinding quality and serves to keep the bearings free from scratches, giving to the bearings a soft velvety finish. The salt is employed for the purpose of dissolving the other ingredients, and the laundry bluing gives to the compound a grayish color when dry, and this color is of particular advantage in that during the grinding process the bearing can be inspected from time to time in order that the high spots thereof may be determined since the grinding compound has sufficient color for this to be apparent.

When the compound is used for grinding bearing surfaces, it is combined with oil or other suitable lubricant in order that the material may be more evenly distributed throughout the surface to be treated.

I claim:

1. An abrading compound comprising an abrading powder, Venetian red, table salt, and laundry bluing.

2. A grinding compound comprising fifty pounds of a pulverized abrading powder, three pounds of Venetian red, two pounds of table salt, and one-half pound of laundry bluing, each of said ingredients being separately pulverized before combining into the resultant mass.

CHARLES FRANKLIN STEPHENSON.