

UNITED STATES PATENT OFFICE.

THOMAS MURPHY, OF CLEVELAND, OHIO.

PACKING AND PROCESS OF MAKING SAME.

No. 928,875.

Specification of Letters Patent.

Patented July 20, 1909.

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To all whom it may concern:

Be it known that I, THOMAS MURPHY, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Packings and Processes of Making Same, of which the following is a specification.

My invention relates to improvements in packings, and process of making same, and, more particularly, to that class known as composition packings, the primary object of the invention being to produce a generally improved packing of this class which will be noninflammable in character and at the same time free from the objections found to packings of this class now on the market.

The improved packing comprises the following ingredients combined in substantially the proportions stated, viz:

Lead	69%
Babbitt	20%
Asbestos fiber	7%
Cylinder oil	2%
Graphite	1½%
Mica (powdered)	½%

It is of great importance to a successful commercial product that the above ingredients be uniformly incorporated and so maintained in the compound in substantially the proportions stated. It has been found to be a matter of considerable difficulty to properly incorporate the graphite and mica with the lead and babbitt, but practical experiments have shown that this can be done in the manner hereinafter described.

In preparing the above, I proceed as follows:

First: Mix graphite and mica together until thoroughly commingled.

Second: Thoroughly melt the lead and babbitt and add thereto the mixture of graphite and mica, continuously stirring, and reducing the temperature of the molten mass until the latter begins to assume a granular condition, this initial granular state being detected by the tendency of the graphite and mica to mix or incorporate with the lead and babbitt. As this granular condition is one of short duration, the ingredients are vigorously stirred from the initial appearance of this condition until all the ingredients have been thoroughly incorporated and reduced to a granular state.

Third: Impregnate the asbestos fiber with the oil and simultaneously impregnate and compact the same with the metallic mixture or the result of step two in the process until the metallic mixture has been thoroughly incorporated and united in a pliable mass, the asbestos fiber forming a binding agent giving a body to the whole. It is of importance that the asbestos fiber be uniformly distributed throughout the mass, and the impregnating and compacting of the mixture with the asbestos fiber and oil is preferably performed by adding the metallic mixture to the latter and manipulating the whole by pounding and kneading with a heavy instrument such as a hammer, or the like, until the whole has been thoroughly mixed and compacted in a pliable mass.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:—

1. The process of making packing, consisting in (1) commingling graphite and mica; (2) reducing lead and babbitt to a molten state and then reducing to a granular state and thoroughly incorporating the result of one; (3) impregnating and compacting asbestos fiber and oil with the result of two in a compacted pliable mass.

2. The process of making packing, consisting in (1) thoroughly commingling graphite and mica; (2) melting together lead and babbitt and adding the result of one, stirring and reducing the temperature of the molten mass to an initial granular condition and then vigorously stirring until the result of one has been thoroughly incorporated and all have been reduced to a granular state; (3) impregnating asbestos fiber with oil and simultaneously compacting and impregnating the same with the result of two until thoroughly incorporated and united in a pliable mass.

3. A packing, comprising molten lead and babbitt reduced to a granular condition with graphite and mica and incorporated and united with a filler of asbestos fiber and oil in a compact pliable mass in substantially the proportions specified.

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

THOMAS MURPHY.

Witnesses:

O. C. BILLMAN,
GEO. H. BILLMAN.