



LEOPOLD BRANDEIS, OF BROOKLYN, NEW YORK.

Letters Patent No. 85,056, dated December 22, 1868.

IMPROVED METHOD OF MAKING CORES FOR MOULDING ARTICLES OF LEAD AND OTHER METALS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, LEOPOLD BRANDEIS, of Brooklyn, county of Kings, and State of New York, have a new and improved Method of Making Cores for Plumbers' Lead Traps, or for any curved casting of lead, tin, zinc, antimony, bismuth, and cadmium, or their respective and mutual alloys.

The nature of my invention consists in providing a suitable mould, and in forming the core on this mould of paper, pasteboard, muslin, silk, *papier-maché*, paper-pulp, or any suitable textile material, or of India rubber, oil-cloth, felt, cloth, and other materials of wool, linen, cotton, or silk, and wire.

To enable others skilled in the art to make and use my invention, I will proceed to describe the operations.

I form my core for plumbers' traps, or for any other curved casting of lead, tin, zinc, antimony, bismuth, and cadmium, or their respective and mutual alloys, of paper or paper-pulp, by compressing the material used over the mould by hand or suitable machinery, and fasten the edges together by glue or any other adhesive substance.

I follow the same process with pasteboard, muslin, silk, linen, or any textile material.

For oil-cloth or India-rubber cloth, I use a solution of India rubber, shellac, or naphtha, or the cements used for such purposes.

If the material used is not stiff or stout enough, I strengthen it by a coating of flour or starch in water, or by mucilage, glue, gum-arabic, &c.; and if it should be desirable to have it fire-proof, I dip the material into a solution of alum, chloride of zinc, or water-glass, prepared with either soda or potash. As is natural, the material has to be thoroughly dried.

The outside mould may be in halves; and pins, of the same material as the articles intended to be cast, may be used to support the core in its position.

What I claim as my invention, and desire to secure by Letters Patent, is—

The production and use of cores (fire-proof or not) made of wire, paper, pasteboard, paper-pulp, muslin, felt, and linen cloth, or of any textile fabric, or of oil-cloth, silk, or India rubber, for casting of plumbers' traps, or other curved articles, made of lead, tin, zinc, bismuth, antimony, cadmium, and their respective and mutual alloys, and the application of paper or other materials, as described, for forming cores to be used in making castings from any metal or alloy.

LEOPOLD BRANDEIS.

Witnesses:

GEORGE HOHNER,
FRIEDRICH KÜRZE.