UNITED STATES PATENT OFFICE.

ISRAEL R. BLUMENBERG, OF WASHINGTON, DISTRICT OF COLUMBIA.

COMPOUND FOR COVERINGS AND JOINT-PACKINGS.

SPECIFICATION forming part of Letters Patent No. 230,996, dated August 10, 1880.

Application filed July 12, 1880. (Specimen.)

To all whom it may concern:

Be it known that I, ISRAEL RUDOLPH BLUMENBERG, a citizen of the United States, residing at Washington, in the District of Columbia, have invented new and useful Improvements in Generator-Covering and Joint-Packing Compounds for Vapor-Engines, of which the following is a specification.

My design is to produce a covering compound and joint-packing for use with vapor-engines, especially with those in which the carbon bisulphide is used as the motor. It is well known that when the heated vapors of this chemical come in contact with the moving parts, with the joint-packings, &c., it absorbs the lubricant. It is also well known that the liquid carbon bisulphide will also permeate cast-iron pipes, and to considerable extent escape through the joints of structures of any kind. For these reasons, more especially, vapor-engines of this class have generally failed of their functions, such is the potency of the material used.

My invention was conceived especially with reference to obtaining means for preventing the escape of this chemical and its vapor from the various parts of a bisulphide-of-carbon engine.

In order to produce a covering for the reservoir, generator, and pipes and a packing for the pipe-coupling joints which would produce the result I aim at and have practically accomplished, I take that preparation of the oxide of lead known as "litharge" and make it into a paste or mass by blending it in a mortar with glycerine, and I have found the yellow litharge or argyritis to yield the best results, and prefer that preparation. This compound may be smeared over the joints, the threads of the joints, as plumbers use the red lead, and it may be spread with a trowel, spatula, or suitable tool over the generator and pipe surfaces and over the reservoir.

In mixing the compound I use barely enough glycerine to make a thick paste—the less glycerine the sooner the mass dries and hardens; but a slight excess of glycerine would merely retard the drying and hardening. When this compound dries it becomes as hard and enduring as stone, and will eminently resist the action of any volatile vapor, steam, or water. For any ordinary purpose the glycerine would act as the usual mixing-oil; but such is the antagonism of glycerine to volatile vapors that it assumes a new function for my compound. In addition to this the combination of litharge with glycerine produces another result utterly different from the combination of litharge with oil, for with glycerine the mass dries into a stony hardness in a manner analogous to but eminently greater in degree than the hardening of plaster-of-paris.

This compound is made only as needed for use; but it might be put up in hermetically-sealed cans and sold to the trade.

I claim—

The generator and reservoir covering and joint-packing compound for vapor-engines, consisting of litharge and glycerine mixed to a mass, as described.

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

ISRAEL R. BLUMENBERG.

Witnesses:

A. E. H. JOHNSON,

J. W. HAMILTON JOHNSON.