

UNITED STATES PATENT OFFICE.

GREEN S. COX, OF BARBOUR COUNTY, ALABAMA.

IMPROVED COMPOSITION FOR METALLIC PACKING IN STEAM-ENGINES.

Specification forming part of Letters Patent No. 6,757, dated October 2, 1849.

To all whom it may concern:

Be it known that I, GREEN S. COX, of the county of Barbour and State of Alabama, have invented a new and Improved Metallic Composition for Packing Steam-Engines; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in a composition of the following metals, to wit: lead, tin, zinc, and antimony, for the purpose of forming a steam-tight packing that is less liable to wear than packing now in use.

To enable others skilled in the art to make and use my invention, I will proceed to describe my composition and mode of using it.

I take of lead twelve parts, of tin four parts, of zinc two parts, and of antimony one part, melt together, and cast it in rings about one inch deep, the thickness and size to be governed by the space around the piston-head and the size of the cylinder. Saw out of the ring, before applied to use, from one-fourth to three-fourths

of an inch, to be regulated by the diameter of the cylinder, so as to allow space for the expansion of the ring in its circumference when heated by the steam. The proportions of this must be varied according to circumstances. Those above named are adapted to a pressure of one hundred and eighty pounds to the inch; but under a medium pressure—say one hundred to one hundred and ten pounds to the inch—less zinc and antimony should be used. The above variations are contemplated in my invention.

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

The application of the composition as above described for the purpose of packing steam-engines.

GREEN S. COX.

Witnesses:

JNO. GILL SHORTER,
WILLIAM W. BERRY.