

UNITED STATES PATENT OFFICE.

JAMES N. HOAG, OF GLOVERSVILLE, NEW YORK.

COMPOUND FOR STOPPING LEAKS IN STEAM APPARATUS.

No. 892,521.

Specification of Letters Patent.

Patented July 7, 1908.

Application filed October 5, 1907. Serial No. 396,121.

To all whom it may concern:

Be it known that I, JAMES N. HOAG, a citizen of the United States, residing at Gloversville, in the county of Fulton, in the State of New York, have invented or discovered a new and useful Improvement in Compounds for Stopping Leaks in Steam Apparatus, of which the following is a full, clear, and exact description.

The invention consists of a dry mixture of substances which when exposed to water and heat in a leaky vessel, such as a steam boiler, flue, pipe, or joint, will seek out and fill the opening, and when allowed to cool will solidify and become sufficiently hard to completely and effectively close the opening and stop further leakage at the points so closed in the subsequent use of the apparatus.

The compound consists of a dry mixture of dry litharge, two pounds, Rosendale cement, one pound, plumbago, one pound, flake asbestos, one pound, iron or steel filings, two pounds, old-fashion oat-meal, four pounds, and rice-flour, two pounds. These ingredients are mixed, in the proportions above named, while in a dry state.

In use, for example in a leaky steam boiler, the fire and water are drawn, and a sufficient quantity of the compound introduced into the boiler, and then water is admitted and steam raised. The steam is kept up for at

least two hours, and the heat and pressure thereof force the compound into the defective parts of the boiler and hold it there. The fire is then drawn, and then the water, and the boiler allowed to cool, over night, or for about twenty-four hours, and as a result the compound becomes fixed, solidifies and hardens and closes up the defective parts of the boiler, forms a substance similar in consistence to the steel of the boiler itself, fills up the defects, leaks, etc., and makes the boiler safe and durable.

What I claim is:

1. The compound consisting of a mixture of litharge, cement, plumbago, flake asbestos, metal filings, oat-meal and rice-flour.

2. A leak-stopping compound, consisting of a dry mixture of dry litharge, Rosendale cement, plumbago, flake asbestos, iron filings, old-fashion oat-meal, and rice-flour, in about the proportions described, adapted to be applied in place under fluid pressure and heat and then set by withdrawal of the pressure and heat.

In testimony whereof, I have hereunto set my hand this 30th day of September, 1907.

JAMES N. HOAG.

Witnesses:

ADA MEAD,

JAMES H. DRURY.