

UNITED STATES PATENT OFFICE.

FREDERIC H. SNYDER, OF JERSEY CITY, NEW JERSEY.

IMPROVED COMPOSITION FOR COVERING STEAM-GENERATORS.

Specification forming part of Letters Patent No. **91,982**, dated June 29, 1869.

To all whom it may concern:

Be it known that I, FREDERIC H. SNYDER, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Composition for Coating Steam-Generators, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof.

This invention relates to a composition for covering steam-generators, steam-pipes, and surfaces generally, when it is an object to prevent the radiation of heat from within or from without; and it consists in a composition which, when ready for use, is in the form of a paste, which may be readily spread upon the surfaces to be protected thereby.

In preparing this paste I use two qualities, of about the same consistency, which I designate as "No. 1" and "No. 2," No. 1 being composed of the following ingredients, and substantially in the following proportions, namely: seven and one-half ($7\frac{1}{2}$) per cent., in weight, of charcoal, pulverized; two per cent. of vegetable oil; five per cent. of coal or wood ashes, the latter of which may be leached before being used, if preferred; eighty-five per cent. of blue clay; sisal and hair, mixed, in about equal quantities, one-half of one per cent.

For No. 2 I use the following ingredients, and in substantially the following proportions, namely: seven and one-half per cent. of pulverized charcoal; two per cent. of vegetable oil; five per cent. of coal or wood ashes; eighty per cent. of blue clay; one-half of one per cent. of sisal and hair, in about equal quantities; three per cent. of rye-flour, and two per cent. of sawdust.

To the above ingredients there is to be added a sufficient quantity of water to reduce them to a paste of the proper consistency to be applied to any surface which it may be desirable to coat with it.

In applying this material I first spread on a coat of No. 1, of, say, one-fourth of an inch

in thickness, which may be done either with the hand or with any suitable instrument to be provided for the purpose, which, after it has become sufficiently dried, is to be covered with a similar coat of No. 2, which, when dry, is to be covered with another coat of No. 1, and so on alternately until a coating of sufficient thickness is produced.

Some of the advantages due to this material as a covering for steam-generators and steam-pipes are: First, it prevents a large percentage of the radiation from the vessel to which it is applied; secondly, its plastic nature renders it easy of application, and makes it feasible to cover a generator with it without leaving any seams or crevices through which heat can escape; and, thirdly, it permits the passage of water through it, so that, in the event of a leak occurring in the generator, its location can be readily ascertained, and a portion of the covering removed, to facilitate repairing the defective part without removing the whole covering.

Another and very important advantage due to this covering is, that it adheres to the surface to which it is applied to such an extent as, in cases where it is applied to steam generators and pipes, to do away with the necessity of any additional lagging or fastening; and this will be done without corroding the metal to which it is applied.

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

The above-described composition, consisting of the ingredients named, and in substantially the specified proportions.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FREDERIC H. SNYDER.

Witnesses:

ROBERT WILSON,
WM. F. CRANE, Jr.