UNITED STATES PATENT OFFICE.

HENRY NOEL POTTER, OF NEW ROCHELLE, NEW YORK, ASSIGNOR TO GEO. WESTINGHOUSE, OF PITTSBURG, PENNSYLVANIA.

METHOD OF MAKING SILICON DIOXID.

No. 875,674. Specification of Letters Patent. Patented Dec. 31, 1907.

Application filed June 10, 1905. Serial No. 264,552.

To all whom it may concern:

Be it known that I, HENRY NOEL POTTER, a citizen of the United States, and resident of New Rochelle, county of Westchester, State of New York, have invented certain new and useful Improvements in Methods of Making Silicon Dioxid, of which the following is a specification.

I have discovered a new and improved method of making silicon dioxid in a state of extreme comminution.

My process consists of first producing silicon monoxid and then oxidizing this to the dioxid. The reaction may be expressed

$$SiO + O = SiO_2.$$

There are various ways of doing this, one is to blow air through an electric furnace in which silicon monoxid is being produced; a second method is to blow silicon monoxid powder and air through a highly heated tube or through an oxidizing flame. The method of producing silicon monoxid is described in my application Serial Number 238,325, filed December 30, 1904.

I claim as my invention:—

1. The method of producing comminuted silicon dioxid which consists in oxidizing silicon monoxid substantially as described.

2. The method of producing comminuted silicon dioxid which consists in blowing an oxidizing gas through a furnace during the progress of a reaction which, *per se*, would liberate silicon monoxid.

3. The method of producing silicon dioxid which consists in oxidizing silicon monoxid substantially as described.

Signed at New York, in the county of New York, and State of New York, this 7th day of June A. D. 1905.

HENRY NOEL POTTER.

Witnesses:

WM. H. CAPEL,

GEORGE H. STOCKBRIDGE.