

UNITED STATES PATENT OFFICE.

HUGO PETERSEN, OF LAZYHÜTTE, GERMANY.

PROCESS OF ENRICHING METALLIC SULFIDS.

SPECIFICATION forming part of Letters Patent No. 657,955, dated September 18, 1900.

Application filed July 5, 1899. Serial No. 722,861. (No specimens.)

To all whom it may concern:

Be it known that I, HUGO PETERSEN, engineer, of Lazyhütte, near Burhatz, in the Province of Silesia, German Empire, have invented some new and useful Improvements in Processes of Enriching Metallic Sulfids; and I declare that the following is a full and clear description of same.

The purpose of the present process is to separate the metallic sulfids from the carbonate of the alkaline earth, with which they are mixed, by dissolving the latter in an aqueous solution of sulfurous acid, thus enriching the metallic sulfids and rendering them more suitable for smelting. The metallic sulfids to be dressed are treated in an aqueous solution of SO_2 at normal temperature. The sulfurous acid acts upon the carbonates of the alkaline earths, which are decomposed into acid or neutral sulfites, which remain dissolved in the sulfurous solution,

CO_2 being disengaged. After the alkaline earth has been completely dissolved the solution is run off and the ore thus dressed purified by means of water. The metallic sulfids are not attacked by this treatment, so that the dressing process involves no loss of ore.

I claim—

The herein-described process of enriching metallic sulfids which are mixed with carbonates of the alkali-earth metals consisting in dissolving out the carbonates with an aqueous solution of sulfurous acid, substantially as described:

In witness whereof I have hereunto set my hand in presence of two witnesses.

HUGO PETERSEN.

Witnesses:

WILHELM WEIDNER,
HERMANN BARTSCH.