## UNITED STATES PATENT OFFICE.

HORACE S. WOLF, OF SOUTH BEND, INDIANA.

## IMPROVEMENT IN PROCESSES FOR CLEANSING GAS-RETORTS.

Specification forming part of Letters Patent No. 165,398, dated July 6, 1875; application filed March 9, 1875.

To all whom it may concern:

Be it known that I, HORACE S. WOLF, of South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Processes for Cleansing Gas-Retorts; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention relates to an improved process for cleansing gas-retorts; and consists in the application of Irish potatoes in the retorts, for making illuminating-

gas, or in any other gas-eliminator.

The process is to place the potatoes, in their natural condition, in the retorts whenever they have become overcharged with the deposit or incrustation of the carbon, and require cleansing. The quantity of potatoes required will depend upon the amount of incrustation, from a gallon to a half-bushel, which may be used without the coal, or with the full charge of coal, as the case may require. When the po-

tatoes are used alone a light draft is given given to the retort; but when the coal is used with the potatoes the retort is closed up in the ordinary manner of making gas. The result from the use of this material is to destroy or neutralize the deposit or incrustation from the coal, while at the same time the quality of the gas is improved. The retort is protected from the injurious effects of the overheating which is necessary to remove this deposit in the ordinary manner, and no time is lost in the use of the retorts, as they are regularly

cleansed while the making of gas is continued. Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is-

The within-described process of cleansing gas-retorts by the use of potatoes, substantially in the manner and for the purpose set forth.

In testimony that I claim the foregoing as my own invention, I affix my signature in presence of two witnesses.

HORACE S. WOLF.

Witnesses:

Lucius G. Tong, JNO. E. FISHER.