

UNITED STATES PATENT OFFICE.

H. P. GENGEMBRE, OF ROCK ISLAND, ILLINOIS.

IMPROVEMENT IN LIQUIDS FOR GAS-METERS.

Specification forming part of Letters Patent No. 20,058, dated April 27, 1858.

To all whom it may concern:

Be it known that I, H. P. GENGEMBRE, of Rock Island, county of Rock Island, and State of Illinois, have invented a new and improved mode of preventing wet gas-meters from being affected by changes of temperature; and I do hereby declare that the following is a full and exact description thereof.

The nature of my invention consists in replacing the water used in gas-meters by means or use of a fluid compound composed of deliquescent earthy and metallic salt or salts at such degree of saturation as will insure the fluidity of the solution at any ordinary winter temperature, and in keeping the upper strata of the liquor always in contact with a substance or substances which will maintain the chemical neutrality of the salt or salts employed.

To enable others skilled in the art to make use of my invention, I will proceed to describe it.

I prepare by the method usually employed an aqueous solution of hydrochlorate of lime in the proportion of seventy-six parts of water to twenty-six, or thereabout, of hydrochlorate of lime. To this I add two parts of hydrochlorate of iron and one part of hydrochlorate

of zinc and a small excess of lime. The liquor having been allowed to settle, the clear part is drawn off, filtered, and it is ready to introduce into the meters. I then suspend in the meters a small piece of lime, or of carbonate of lime, in such manner as it will always be immersed in the upper strata of the liquor, thereby keeping the salts of the solution always neutral.

I do not claim replacing water in wet gas-meters by a liquid not affected by frost, as I am aware that alcohol has been employed for that purpose; nor do I claim keeping a salt solution neutral by the presence of a base or carbonate; but

What I claim as my invention, and desire to secure by Letters Patent, is—

The use of an aqueous solution of deliquescent metallic and earthy salt or salts in gas-meters, and the suspension in the upper strata of the liquid of a base or carbonate of the base of the salt or salts employed, substantially in the manner and for the purpose as set forth.

H. P. GENGEMBRE. [L.S.]

Witnesses:

R. GRAHAM,
HENRY P. BURGH.