

the former: and the jet of hydrogen is placed between a jet of oxygen, within it, and the atmospheric air without.

Under the table, is a gallows, (G) with a screw for attaching a pipe, leading from a self-regulating reservoir of hydrogen.

Society for the Promotion of Internal Improvement, &c.

REPORT ON ROMAN CEMENT.

Letter of J. I. Hawkins, Esq. to Mr. Strickland, accompanying a report upon the manufacture of ROMAN CEMENT, &c.

London, Oct. 31st, 1825.

DEAR SIR,—I regret exceedingly, that circumstances against which I could not provide, have put it out of my power to make the inquiries on the subject of iron, which I contemplated, and which are necessary to the completion of my intended report upon the process of making iron and steel.

I have not yet been able, and I do not now see a very near prospect of being able, without injury to Messrs. Perkins & Co. to shift from myself the care of their concerns, and, therefore, cannot promise the Report in any given time, but it is my intention to complete it as soon as practicable, and forward it to you in Philadelphia; taking the chance of its containing so much information, not anticipated through other channels, as may entitle it to the favourable attention of the Society for which you act.

I have the pleasure, however, of herewith furnishing you with some samples of the stone, from which the Roman Cement is made, together with a description of the same, and of the mode of preparing the cement; which samples and description, I beg you to present to the Pennsylvania Society for the promotion of the Internal Improvement of the Commonwealth, as a small token of my cordial feeling for the interests of that state, in which I formerly spent several happy years, and within, or in sight of which, on the banks of the Delaware, I fully expect, and intend, to terminate my ramblings, in little more than six months from the present time.

I hope this packet may reach you in time for your embarkation, but if it should not, I shall request Messrs. Curwen & Hagarty, to forward it by the first opportunity.

I have sent small specimens, for the sake of making a small packet for you; but I have endeavoured to select such as will fully show the character of the stone.

Yours, &c.

JOHN J. HAWKINS.

W. STRICKLAND, Esq.

To the Pennsylvania Society for the Promotion of the Internal Improvement of the Commonwealth.

GENTLEMEN—From many years residence within the state of Pennsylvania, I feel strongly attached to the interests of the Common-