

As a stranger I feel that my suggestions could have little weight without some assurance being given to you that I was competent to speak professionally on the matter, and, therefore, (although under the circumstances I should willingly have avoided speaking of myself) it is right perhaps to mention that for several years past I have been engaged in England exclusively in drainage, general hydraulic and sanitary operations, and that on the passing of the public health act, I was in consequence one of those whom the General Board of Health consulted as to the carrying out of that important measure. I had also been appointed some few years previously an assistant commissioner under the general drainage acts, and which appointment I held when I left England last summer. It was also my good fortune for some years prior to his death to enjoy the confidence and co-operation of that well known and eminent authority on such subjects, the much lamented Mr. Smith, (of Deanston,) who was one of the parliamentary commissioners to enquire into the sanitary condition of the kingdom, and from whom I received much valuable practical information.

In the communication with which I was then honored, the General Board of Health speak of the qualifications required in engineers of sanitary works in the following significant terms, "the Board have been made deeply sensible from the fact of their existence, and by the extensive failures and the worse than waste of public money in works of town drainage that have been planned and carried out by engineers and architects of even very high professional standing and general ability, that the qualifications required for carrying out new drainage areas, for conducting works of house and land drainage and water supply, and the application of refuse as manure, *are very special and demand a peculiar kind of scientific knowledge and practical ability,*" and which are probably equally applicable on this side of the Atlantic.

Now as respects the two modes of pumping from the low level and self-gravitation from a sufficiently elevated source,