

REPORT.

THE valuable results obtained from the Hourly Meteorological observations made in the years 1824 and 1825 at Leith, and subsequently at Plymouth, by W. S. Harris, Esq. F. R. S. &c. for the purpose of determining the laws of diurnal variation of temperature, induced me as far back as 1836, to apply on behalf of this Society to the then Commander of the Forces in Canada, His Excellency Sir John Colborne, (now Lord Seaton,) for the co-operation of the Military Guard stationed at the Island of St. Helen, opposite this city, to carry into effect a series of observations similar to those executed in Britain. With that readiness which ever distinguished His Excellency, where any public benefit was to be conferred, the requisite general order was immediately obtained, but the unfortunate troubles which broke out in 1837 and 1838, put an end for some time to the peaceful arts—and it was not therefore till July, 1839, that I was enabled to commence the present series of observations.

The general order obtained, directed the recording of *hourly* observations, but upon enquiry I found that as the relief of sentinels took place at every *second* hour, I should be compelled to trust the accuracy of the intermediate observation to the attention and punctuality of the non-commissioned officer of the guard, (a person daily changing,) without any check upon him. I therefore preferred limiting my observations to every second hour, with the certainty of these being regularly and punctually executed, rather than