up the hourly columns of each month, that the curves of temperature were very irregular, the irregularities being evidently caused by the black-bulb thermometer not being properly sheltered from the wind.* I have included these months in the following tables, but they must be considered as very imperfect. In the winter there were many calm days, but as the spring advanced the air was seldom still when the sun shone; and in May, therefore, I completely sheltered the blackened thermometer by enclosing it in a large thin glass bottle. In this month the mean excess of the temperature indicated by the blackened thermometer over one in the shade rises in the morning at each successive hour of observation, attains its maximum at noon, and descends again in the afternoon, as shewn in the accompanying plate (Plate V.) And this I regret to say is the only month for which I possess hourly observations to be depended upon. I left the Fort in June, and though Mr Dease kindly continued the observations every third hour in July and August, yet as he had no watch whereby to measure the time, the results for these months must be somewhat uncertain. It is satisfactory, however, to find that both the mean excess and the maximum excess in these two months are greater the nearer the hours are to noon. From September 1826 to the end of April following (1827), the observations were continued at 8, 10, 11, A.M., and 1, 2, 4, P.M., and after the middle of February at noon also by Sir George Back and Lieutenant Kendall; and though I have not their original registers to refer to, I have extracted from Franklin's appendix as many of the results as the tables there given would furnish.

For these observations, a pair of thermometers corresponding most nearly with each other in their scales was chosen. Up to the end of April 1826, spirit-thermometers were used; in May, July, August, and September, mercurial ones were employed; and from November till the end of April 1827, the spirit ones were resumed. They were all constructed by Newman, and had spherical bulbs half an inch in diameter. The thermometer exposed to the sun was prepared by coating its

^{*} See Franklin's Appendix above quoted, where the days on which the wind affected the black-bulb thermometer are marked by an asterisk.