burgh ; and he received a gold snuff-box as a compliment for his assistance in reforming the culinary establishment of Heriot's Hospital.

After so active and diversified a career, it was not to be expected that he would be satisfied with the monotony of a permanent residence in London. He was so accustomed to labour for the attainment of some object, that when the object itself was completely within his reach, and the la­bour was ended, the prospect, which ought to have been uniformly bright, became spontaneously clouded, or the serenity even became unenjoyable for want of some clouds to afford a contrast. He had fitted up a small house at Brompton, with every contrivance for comfort and conve­nience that could render it fit for the abode of hospitality and of luxury ; and the arrangements are fully described in the *Bibliothèque Britannique* of his friend Professor Pictet ; but after all he never was known to give a single enter­tainment in it. The enthusiasm excited by the novelty of some of his inventions had subsided ; and he was even mor­tified by becoming, in common with the most elevated per­sonages of the country, the object of the impertinent at­tacks of a popular satirist. It was partly, however, if not entirely, the superiority of the climate of France, that de­termined him to remove to Paris in the spring of 1802. He went in the summer to Munich, and the following year he made a tour in Switzerland and in Bavaria, accompanied by Mademoiselle Lavoisier, whom he married soon after their return ; but their habits were incompatible with ma­trimonial comfort, and they separated soon after ; Count Rumford retiring to Auteuil, about four miles from Paris, where he occupied a house which had formerly belonged to Helvetius and to Cabanis, while his lady continued to live in the metropolis. His latter years were passed almost wholly in solitude; he saw only his neighbour Mr Cane- leux, Mr Underwood, and a Mr Parker, an American. He did not even attend the sittings of the Institute, though he had been made one of its eight foreign associates some time before, and always retained a high esteem for its secretary’ Cuvier, and for some others of its members. His income was abundantly sufficient for his own expenses ; for he had obtained from the gratitude of the king of Bavaria a pen­sion of L.1200 a year; and he was allowed by Bonaparte to remain unmolested, though a British subject, when it was found that he had no intercourse with society, amusing himself principally in walking about his garden, and in a solitary game of billiards. In the latter part of his life he bad so completely persuaded himself of the great superio­rity of broad wheels above narrow ones, that he drove about the streets of Paris in a broad-wheeled chariot ; and hav­ing rediscovered, after Professor Leslie, that black bodies radiate more heat than others, he wore, in the winter, a white hat and a white coat, in order to economize the heat of his person. “ These peculiarities, and a peremptory un­yielding disposition,” says one of his biographers, “ were the causes that set him apart from social intercourse, and in all his connexions in life seem to have rendered him less the object of personal attachment than of esteem for his talents and activity.” He was about to return to England when he died, on the 2lst of August 1814, leaving only one daughter, who afterwards resided in his house at Brompton.

1. Count Rumford’s first publication appears to have been the chapter on Marine Artillery which he furnished to Stalkart’s Treatise on Naval Architecture, 1780.

2. New Experiments on Gunpowder, with the Descrip­tion of an Eprouvette. Phil. Trans. 1781, p. 230. The ef­fect of the powder on the ball was measured by the recoil of the piece, with a correction deduced from the recoil when the piece was empty. It was observed to be sooner heated when fired without ball than with it. The force of the powder is made at least 1300 atmospheres, upon Robins’s principles.

3. New Experiments upon Heat. Phil. Trans. 1786, p. 273. These experiments relate principally to the conduct­ing powers of various mediums for heat ; but the results are unavoidably complicated with the effects of radiation, in consequence of which a vacuum is supposed to possess a conducting power more than half as great as that of com­mon air.

4. Experiments on the Production of Dephlogisticated Air from Waterwith various Substances. Phil. Trans. 1787, p. 84. These experiments tend to show that the air ob­tained by Priestley and Ingenhousz, from plants under water, was derived rather from the water itself than from the substances immersed in it.

5. Experiments made to determine the Positive and Relative Quantities of Moisture absorbed from the Atmo­sphere by various Substances. P. 240. He finds that wool is more absorbent of moisture than any other substance compared with it ; and hence explains the supposed advan­tage of woollen worn next the skin.

6. Experiments on Heat. Phil. Trans. 1792, p. 48. The author attributes the effect of loose substances in obstruct­ing the passage of heat to their attraction for air, and to their impeding its circulation ; and he supposes this to be the only manner in which elastic fluids communicate heat.

7. Account of a Method of Measuring the Comparative Intensity of Light emitted by Luminous Bodies. Phil. Trans. 1794, p. 67.

8. Letter announcing a Donation for a Prize Medal. Phil. Trans. 1797, p. 215.

9. Experiments to determine the Force of Fired Gun­powder. P. 272. This force he supposes to amount to be­tween 20,000 and 50,000 atmospheres, instead of 10,000, as Bernoulli computed it ; but he makes a great mistake in supposing that the whole of the water which can possibly be contained in the gunpowder would be sufficient to fur­nish as much steam as would be required, since steam, un­der a pressure of 20,000 atmospheres, must be considerably more dense than water itself.

10. Inquiry concerning the Source of the Heat excited by Friction. Phil. Trans. 1798, p. 80. The capacity of the chips of iron afforded by friction in boring a cannon, was found not to differ from that of the iron in its original state : hence it is inferred that the heat could not have been fur­nished by them, and that it must probably have been gene­rated. Mr Haldalt afterwards repeated the experiment un­der circumstances still more decisive ; and Sir Humphry Davy showed that two pieces of ice rubbed together, in a room below the freezing temperature, would melt each other.

11. Inquiry concerning the Chemical Properties that have been attributed to Light. P. 449. He attributes these properties to the effect of an intense heat confined to a small space ; but the latter experiments on the chemical effects of the spectrum are sufficient to supersede this opinion.

13. An Account of a Curious Phenomenon observed on the Glaciers of Chamouny, with some Observations on the Propagation of Heat in Fluids. Phil. Trans. 1804, p. 23. An effect depending on the expansion of water in cooling near the freezing point.

14. Concerning the Nature of Heat, and the Mode of its Communication. P. 77. He conjectures that cold is a po­sitive quality, capable of being propagated by radiation.

Several of these memoirs were reprinted under the title of Philosophical Papers, vol. i. Lond. 1802, 8vo.

15. The Essays constitute four volumes 8vo. Lond. 1795-1800. Reprinted 1800. In French, 2 v. 8. Genev. 1799. Recueil de Rapports...sur les Soupes. Par. 1801. They are eighteen in number, i. Account of an Esta­blishment for the Poor at Munich. In Ital. 8. Venice, 1798. ii. On Establishments for the Poor in general, iii.