

In 1729, the annual expenditure of the government of Canada was £16,166 13s. 4d.; in 1759, the disastrous year which witnessed the fall of Quebec, the expenditure rose to £1,083,330 6s. 8d. stg., but this vast outlay did not increase the trade of the country, Military operations, glory and extravagance, consuming it all. In 1754, the number of vessels engaged in foreign trade with the Colony only amounted to fifty-three, bearing a total importation valued at £216,769, and an exportation valued at £75,560, leaving a balance against the Colony of £141,209 sterling.

After the fall of Quebec, trade increased and assumed a healthy tone; the imports no longer exceeded the exports; another race less addicted to military glory acquired a standing in Canada, and began to develop its long neglected resources. But the country people, of French origin, had received an indelible impress of character and disposition which they have retained in many particulars up to the present day.

Discoveries at Pompeii.

Under the government of the Neapolitan Bourbons, it was the custom to unearth a house at Pompeii on the occasion of a visit from some illustrious guest of the king. The visitor was allowed to pay the expences of the honour conferred upon him. A fear was entertained that if all the buried treasures of the city were at once exposed, all interest in the discoveries would gradually die out, and "strangers' money" would soon be wanting to gladden the eyes of Neapolitans. Moreover, if the work had been at once completed, the king must of necessity have paid the expences, Thus by spreading it over a number of years, the appetite for antiquities was fed but never satiated, and the cost of entertainment did not tax the king's pocket. The "Ré Galantuomo" does not, it appears, act on this shabby system, for we hear that no less than three houses have within the last month been exposed to view. One is of unusual extent and magnificence, and is enriched with wall paintings of rare design and workmanship. It forms another illustration of the 6th book of Vitruvius, wherein the domestic architecture of the Romans is so minutely described, and recalls Pliny's account of the luxury and splendour in which the more favoured citizens indulged; but neither Crassus, Pollio, or Lucullus, would ever have placed "Salve Lucrum," as we find the ashed-out owner of the latest discovered villa has done, upon his very door step. We have heard already of "salve" and of "cave canem," and we have seen them repeated upon English door-mats, but the new inscription will have, we fancy, no duplicates made of it.

The other discovery is a baker's shop, which has, of course, been closed for nearly 2,000 years, but in which everything has remained in such order that the baker might be supposed to have just left it, and might be momentarily expected to return and resume his vocation.—*Building News.*

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

The following is an abstract of Mr. Glaisher's paper on the recent balloon ascents.

All philosophical inquiries carried on or near the surface of the earth are of necessity fully within its influence, and consequently within the influence of many disturbing causes. By no other means than the use of the balloon can we free ourselves from these disturbing influences. Let us consider what sciences might be thereby benefited—chemistry probably, magnetism certainly, and meteorology and astronomy. When we regard the influence which a clear sky or a cloudy one exercises upon the temperature, and so upon our comfort and well-being generally, we see the importance of cultivating an acquaintance with the higher regions, and increasing our knowledge with aerial phenomena. I will now state the object of the experiments which have been instituted. The committee charged me with two primary objects. 1. Determination of the temperature of the air and its hygrometric state at different elevations up to five miles. The secondary objects were, to compare the readings of an aneroid barometer with those of a mercurial barometer; to determine the electrical state of the air; to determine the oxygenic conditions of the atmosphere by means of ozone papers; to determine the time of vibration of a magnet on the earth and at different distances from it; to determine the temperature of dew-point by Daniell's dew-point hygrometer and Rognault's condensing hygrometer, and by the use of the dry and wet bulb thermometers as ordinarily used, and by their use, when under the influence of the aspirator, to collect air at different elevations; to note the height and kind of clouds, their density and thickness, at different elevations; to determine the rate and direction of different currents in the atmosphere; to note atmospherical phenomena; and to make general observations. The ascents were all made by Mr. Coxwell's large balloon, three of them from Wolverhampton, four from the Crystal Palace, Sydenham, and one from Mill Hill, near Hendon, where the balloon had fallen the night previously. The first ascent was from Wolverhampton, on 17th July last. Owing to the force of the wind considerable difficulty was experienced in the preliminary arrangements, and I was unable to place a single instrument in its position before starting. The ascent took place at 9.43 a.m., and at once the balloon was quiescent. The degree of tranquillity experienced was remarkable, considering that but a few minutes had elapsed since the balloon was agitated. The swaying to and fro had ceased in an instant, and I at once proceeded to fix the instruments. At the height of 4,000 feet we entered a stratum of clouds of nearly a mile in thickness. A height of more than 10,000 feet had been passed before I could put all the instruments in working order. The sky was of a deep Prussian blue colour, without a cloud of any kind upon its surface. At starting, the temperature of the air was 59°; at 4,000 feet, 45°, and descended to 26° at 10,000 feet, and then there was no variation of temperature between this height and 13,000 feet. During the time of passing through this space, Mr. Coxwell and myself both