

da, as well as from the United States. Possessing these combined attractions, it is by no means unreasonable to infer, that in the lapse of a few years, it will become the most flourishing and prosperous city in the British N. American dominions; and Quebec, viewed as a military position, may always be looked upon as an impregnable bulwark to them. The harbour of Montreal is not very large, but always secure for shipping during the time the navigation of the river is open. Vessels drawing fifteen feet of water can lie close to the shore, near the market gate, to receive or discharge their cargoes; the general depth of water is, from three to four and a half fathoms, with very good anchorage every where between the Market-gate Island and the shore: in the spring this island is nearly submerged by the rising of the river; but still it is always useful protecting ships anchored within it from the violent currents of that period, and at times serves as a convenient spot for repairing boats, water casks, and preparing other indispensable works.

The environs of Montreal exhibit as rich, as fertile, and as finely diversified a country as can well be imagined. The space near the town, and round the lower part of the mountain, is chiefly occupied by orchards and garden grounds; the latter producing vegetables of every description, and excellent in quality.

SCIENTIFIC.

SOLIDIFICATION OF CARBONIC ACID GAS.

MR. KEMP, of Edinburgh, who has been so successful in his experiments upon the liquification of the gases, has succeeded in reducing carbonic acid gas to the solid state. This experiment which had been previously shown in Dr. Hope's class-room, Mr. Kemp exhibited before the Wernerian Society, in presence of Professors Jamieson, Forbes, Graham, Trail, Welsh, Pillars, Dr. Neil, and a number of other scientific gentlemen. The gas requires a pressure of thirty-six atmospheres to reduce it to the liquid form. When the pressure was removed, by opening a small stopcock in the condensing apparatus, the cold, produced by the rapid evaporation of the liquid, was so great, that the whole mass was almost instantly reduced to the solid state; and in this condition, although the temperature could not have been less than 180 degrees below zero of Fahrenheit, it was handled and tasted by many of the gentlemen present. This circumstance indicates, in a remarkable manner, the slow conducting power of the substance. When solid mercury is applied to the skin, in its passing to the liquid form, it produces such a degree of cold, as to cause disorganization of the part. Nevertheless, the solid carbonic acid was applied to the tongue without producing any disagreeable sensation; but, when mixed with the sulphuret or proto-iodide of carbon, the cold produced was so intense, that every liquid to which the mixture was applied, was instantly frozen.—Mercury, in the proportion of twenty parts of the metal to one of this powerful freezing mixture, was solidified. Liquified chlorine and cyanogen gases were also frozen by it; and, as Mr. Kemp had previously solidified sulphurous acid gas, there are now four substances, lately known to us only in the gaseous state, which he has now exhibited to the world in the form of tangible solids. This is the first time that the solidification of carbonic acid has been accomplished in Great Britain. Many important results may be expected to accrue from it. The degree of cold that may be produced in consequence, is so far beyond any that has hitherto been attained, that there can be no doubt, that any liquid may be frozen by it; and it will be a powerful agent in producing the condensation of those gases that have hitherto resisted all attempts to reduce them to a liquid form.—*Scotsman*.

DESTROYING FIRE-DAMP.—We understand that Mr Charles Burrows, mason, of St. Austin, after studying many years the best method of destroying damps in coal mines, which have proved fatal to so many thousands of human beings, has at length succeeded in constructing a machine which will effectually destroy them, and enable the miner to prosecute his work with the aid of a lighted candle, without lantern, or any covering, in perfect safety.—*West Briton*.

PROFESSOR STEINHEIL'S GALVANIC TELEGRAPH.—The King of Bavaria was lately witness to a trial of the galvanic telegraph of Professor Steinheil. The wire was conducted from Bogenhausen to the residence of M. Steinheil, in the Lerchenstrass, passing over the houses and domes of the city. His Majesty, who was at Bogenhausen, put questions to the professor, and received instantaneous answers. The wire is to be taken down from its present position, and conducted through tubes placed in the ground, and we have every expectation that this invention will shortly be brought into extensive service.—*Times*. [*English Paper*.]

DEATHS OF SCIENTIFIC TRAVELLERS SINCE 1830.

—We cannot, without pain, reflect on the number of individuals who have distinguished themselves for a zeal in promoting knowledge, and in their ardour became victims. Many of late have died in foreign countries, where they went to make researches for extending our knowledge of the various branches of philosophy. Some died from the various influences of the climate, or plague prevalent at their destinations, or upon their routes; some from fatigue and incidental hardships, some by accident, and others have been drowned inland or by shipwreck. We will here enumerate the names of several who have been lost to science since 1830:—M. M. Beyrich and Frank died in South America. The former had completed his journey over the Brazils; and the latter was enriching our country and his own from the Flora of Ohio; his collections of specimens were exceedingly abundant. M. Schiede, an indefatigable collector in the Mexican Flora, died in Mexico of typhus fever; Mr. Drummond in the island of Cuba; M. M. Zippelius and Van Raalten in the Moluccas; M. Brocchi died at Dargola, in Nubia; and M. Raddi in Egypt; another eminent person died of pestilence in Cairo. M. M. Michaelis, Berger, and Decker, all naturalists of Bavaria, became victims to malignant fevers; the first two in Greece, and the other in Palermo. M. Jacquemont, after travelling during three years across the high plateaus of Asia and Hindostan, ceased to exist when at Madras, and at the moment when he was to have returned to Europe. M. M. Mertens, Escholtz, and Rengger, after having nearly traversed the known world, died from long endured fatigue, almost immediately after their return home; and the same fate befell M. Montrelet, who had visited the oriental countries. Several died by accident:—Mr. Sellers was drowned in the river San Bransco; the enterprising M. Bertero was shipwrecked on the Atlantic; M. Douglas, who discovered in California, and brought away from thence many beautiful plants now flourishing in Britain, fell into a pit in the Sandwich Islands, designed to entrap wild beasts, and was there killed by a wild bull, which was ensnared soon afterwards; M. Van Hassett lost his life in nearly the same manner—he was trampled to death by a rhinoceros; lastly, Mr. Allan Cunningham was murdered by savages in the interior of New Holland, during the expedition of Major Mitchell—it is conjectured from the information procured upon the subject, that the unfortunate travellers had all erred in their courses, and separated; that they must have wandered in the wilderness for several days, and then, enfeebled by fatigue and want, yielded to a troop of natives.—*Monthly Magazine*.