

first record of experimental proof, was from an Academy of Florence, in 1694, under Duke Cosmo the Third, when a diamond was subjected to a powerful burning lens. It first split, then emitted sparks and finally disappeared. M. Guyon de Morveau in 1785, exposed a diamond inclosed in a cavity in a piece of iron to intense heat. When the cavity was opened the diamond had entirely vanished, but the iron around was converted into steel, thus proving the gem to consist of pure carbon.

It has been found possible to manufacture diamonds by the crystallization of carbon, but hitherto of a size so infinitesimally minute as to be of no value except in a scientific point of view. Brilliant points may occasionally be observed in coke that has been exposed to furnace heat; these are diamond particles and are capable of cutting glass. Thus, in the marvellous laboratory of nature, the commonest and poorest matter becomes converted into the most precious gem.

The diamond frequently becomes phosphorescent on exposure to the sun's rays. The Hon. Robert Boyle, writing in 1672, says, "I have in my keeping a diamond which, by water made a little more than lukewarm, I could make to shine in the dark." It is no doubt this phosphorescent quality that gave rise to the legendary power of diamonds and carbuncles to light, a belief we find very ancient. In the talmud it is said that Noah had no other light in the ark than furnished by precious stones. The Vedas of the Brahmins also speak of a place lighted by rubies and diamonds which emit light like those of the planets.

The rough diamond is a little more attractive than the common pebble; its brilliancy being concealed under a hard crust, that can only be removed by diamond powder. Though the art of cutting the gem has only been brought to perfection during the last few centuries—those cut and polished at Golconda being of clumsy workmanship—the stone was formerly valued for other, and for the most part fabulous, qualities.

#### THE LATE LIEUT.-GENERAL WINDHAM.

It is our mournful duty to day to record the death of Sir Charles Ashe Windham, K. C. B., the General lately in command of Her Majesty's Forces in Canada. Our readers were made aware a few days ago of the illness of this veteran and much respected soldier; and it was known that the symptoms of his disease had been sufficiently alarming to induce a call for Lady Windham to follow him to Florida, where he had gone on leave of absence in the hope that a milder climate and release from duty might restore him to health. The later intelligence which reached us respecting him led to the hope that he might partially recover, though the disease of the heart, from which he suffered, did not permit of the expectation of his complete restoration. The last news which had been received in this city, previous to that which we now communicate, represented him as somewhat better. This was to the 26th ult.; but on that day the house where he resided was destroyed by fire, and the General had to be removed. How far that may have hastened his end, we do not yet know; but there can be little

doubt that, in the state to which he had been reduced, the agitation caused by this occurrence must have had an exceedingly ill effect. He died next day 3rd inst. Sir Charles came of a distinguished line of Englishmen, being the son of the late Vice-Admiral, who was the nephew of the eminent statesman, William Windham. He was born in 1810, and was, therefore, 60 years of age; entered the Coldstream Guards as Lieutenant on the 30th Dec., 1826; became Lieut.-Colonel 29th June, 1846, Major-General 8th September, 1855, Colonel of the 46th 17th June, 1861, and Lieut.-General 5th February, 1863. General Windham served in this country during the troubles of 1838, and continued here till 1842. He was afterwards in Ceylon and on other service with the corps to which he belonged. At the breaking out of the war with Russia, he was appointed A. Q. M. G. to the 4th Division, and landed in the Crimea on the 14th September, 1854; continuing with the army without a single day's intermission of duty till July, 1856. During the siege of Sebastopol he was promoted by General Simpson to the command of a brigade, and all the world knows the distinguished part he took at the battle of Inkerman, and afterwards at the assault on the Great Redan, which no led in person on the eventful 8th September. On that day he remained almost single handed exposed to the overpowering force of the defenders of the work until almost every one of his followers had been mown down by the repeated showers of grape and musketry. He was, notwithstanding, one of the few survivors of that gallant assault who returned un wounded from the "imminent deadly breach." For this action he was promoted to the rank of Major General, created a C. B., with the command of the 4th Division, and made Chief of the Staff. When Sebastopol was captured he received the additional honour of an appointment to the Governorship of the Suburb of Karabelnaia. He was elected member of Parliament for East Norfolk in 1857; taking his seat on the liberal side of the House. But in the same year his military services were again required, and he was sent during the mutiny to India, where he commanded at Cawnpore, and at the action on the Pandoo Nuddee, where he beat the Gwalior contingent on the 26th November. He also commanded in actions on the 27th, 28th and 29th of the same month, and led a division under Lord Clyde during the advance to the Kallee Nuddee, the action on that river, and the farther advance to Futteghur. He was subsequently appointed Military Governor of Lahore. He succeeded Sir John Michel in the command of the Forces in this country in 1867. Sir Charles received the Crimean medal with four clasps, and the Indian medal; was a Commander of the Legion of Honour; was one of the first class of the Military Order of Savoy, and of the second class of the Medjidie. We need only add to this short account of Sir Charles' distinguished services, that his bravery on the field was equalled by the courtesy which he exhibited on all occasions to those with whom he was brought into contact by official duties or social relations.

We believe that General Windham, though in ill health from disease of the heart when he left Canada, had, on his way to Jacksonville in Florida, gone round to Kansas for the purpose of seeing some lands which he had purchased there in the Spring of last year, from whence he went to the milder climate of Florida. His death-bed was soled by the presence of Lady Windham, who had happily arrived in time. Capt. Hudson and Mr. Hare, his Aide-de-Camps, were also present, as well as Dr. Smith and

Mr. P. S. Stevenson, himself an invalid at the great Southern Sanatorium. It is at present supposed that he will be buried in Florida, but this is uncertain.

#### NEW ZEALAND.

The Maori rebellion in New Zealand, about which so many fears have been expressed and which seem likely to lead to a serious difficulty between the Home and New Zealand Governments is apparently drawing to an end. A battle is reported to have taken place between hostile Maories and the Colonial force, the latter consisting of a mixed force of natives and English. The hostile Maories were completely overthrown, and driven from the pass in which they had entrenched themselves.—Thirty-seven were killed, and several women were taken prisoners, the remaining men escaping into the woods. The leader of this band was a chief of the name of Te Koote, who had previously shown himself active amongst the native enemy. He escaped along with the other fugitives, but the moral effect of the victory will be great, especially among the waverers of whom there are several natives of influence, who now express a wish to make terms with the British. The effect of this turn in events will, doubtless, be most salutary, and give a great impetus to immigration to New Zealand—a country whose climate is found to be most congenial to Europeans, and which from the geographical situation and surroundings is not likely to be disturbed by outside political influences.

A silver mine has been discovered in Carnarvonshire, Wales.

The British Parliament will re-assemble on the 8th of February.

A project is on foot to build a railway from Morristown, U. S., to Philadelphia, to connect with the Brockville and Ottawa Railway.

The remains of the late Mr. Peabody were taken from the *Monarch* to the City Hall, Portland, on the 29th inst., amidst great ceremony.

MILITARY SURVEYING.—A party of Royal Engineers went yesterday morning on a surveying expedition on the St. John's Road; they were accompanied by a fatigue party of the 69th Regt.—*Quebec Chronicle*, Jan. 29th.

VOLUNTEERED.—The members of the Mount Forest Rifle Company, at the drill on Saturday evening last, by unanimous agreement instructed Captain Pearce to offer the services of the company to the Government for duty at Red River, if required. This was duly transmitted on Monday by the Captain through Lieut. Col. Higginbotham to Col. Taylor, D. A. G. The spirit of patriotism thus shown is most creditable to the officers and men of the company.

MORE AMERICAN "CHECK."—The matter of extending protection to "American citizens," held by Great Britain for participation in the Fenian insurrection was recently under consideration by the House Committee on Foreign Affairs. A resolution was authorized to be reported, calling upon the Secretary of State for information regarding such "Americans" as are now imprisoned, and expressing the opinion that the government ought to demand their instant release. It remains to be seen whether this "resolution" applies to the "Americans" in the Kingston Penitentiary.—*Daily Intelligencer*.