

Around the circumference were placed upright slabs of limestone three feet high, and at least ten bodies had been lodged in the grave, arranged in a sitting posture with their backs against the slabs, and the hole had then been filled up. The teeth showed that the majority were of middle age, whilst the remainder included old persons and children still retaining their milk teeth. The limestone slabs projected a few inches above the present surface of the soil, so that if the grave had ever been covered with an earth mound the latter must have been removed, perhaps washed away. The only artificial object found was one solitary potsherd; hence there is no evidence to prove or disprove any speculation which may be indulged respecting the people whose burial-ground had been thus laid open in the interest of science. It is perhaps safe to conclude that all the bodies found in the grave were placed there at one and the same time.

The Salt Cave, near the Mammoth Cave, and rivalling it in the size of some of its branches, was difficult of access, on account of loose rocks which had fallen from the roof, and of a stream of falling water running off between them. Having effected an entrance, the descent of a steep hill of loose rock led into a large gallery several miles in length, the floor of which was covered with fallen rocks. Small areas were occasionally found, however, where no such masses presented themselves, but where fires had been kindled, and where small piles of stones had been raised around a small central hole having ashes and remnants of burnt sticks at the bottom; whilst on the adjacent rocks there were in some cases found small bundles of sticks tied with bark, and of a convenient size to be placed in the holes, thus indicating that they had been brought into the cave to be used as lights and as firewood.

Further on, in a small chamber never previously visited by a white man, there were seen on the cave earth the imprints of feet shod with peculiar braided mocassins or sandals. In some of the side chambers were found a great number of cast-off sandals, very finely made of the twisted leaves of some rush braided in a careful and artistic way. The manner of braiding was identical with that of the straw sandals from China, but the form of the sandal itself was different. About twenty-five of these sandals, of various sizes and of slightly varying designs, but all worn through at toe and heel, were found in the interior chamber of the cave.

A piece of cloth more than a foot square, and finely and regularly woven, probably from the inner bark of some tree, was also found, and was especially interesting from having been dyed or coloured with black and white stripes, and from having in one place been mended by darning.

Mr. Putnam also exhibited bunches of the bark used to make the cloth, and of different degrees of fineness; a number of pieces of bark, twine, and rope, some made of twisted strands simply, whilst others were of a five-strand braid and of a more pliable substance; a small piece of quite a delicate fringe or tassel of neatly braided fibres; a number of reed "torches," generally burnt at one end; a few small fragments of burnt wood, one of them showing the rough cutting of a flint axe; several fragments of a large gourd, of a species probably not indigenous; two flint arrow-points; a few fragments of shells of the *Umio*; and a few feathers of probably the wild turkey. All the specimens of cloth, &c. from Salt Cave were extremely brittle, and had only been preserved by saturating them with gelatine and afterwards mounting between glass. No bones or other relics indicative of the food of the cave people were found, nor was there any evidence of human interment, though the earth in one of the chambers had been disturbed; the state of Mr. Putnam's health, however, prevented him from making anything like an exhaustive examination. It is encouraging to know that it is intended to continue the work until more is ascer-

tained of the archæology of this large group of important American caves.

The discovery, in 1812-15, of bodies buried with care in some of the caves of Kentucky and Tennessee, and of the numerous articles found with them, was alluded to by Mr. Putnam, who stated that since his return from Kentucky he had examined the body, and what remained of the very large number of articles found with it, that was so widely known as the "Mammoth Cave Mummy" sixty years ago. This body, in reality found in Short Cave, had been taken to the Mammoth Cave, eight miles distant, for exhibition. The relics had been sadly neglected, and many of the articles found in the grave had been lost and others had gone to decay; still enough remained, at the rooms of the American Antiquarian Society at Worcester, to identify the articles found in Salt Cave as the same in material, design, and structure as those found with the body in Short Cave, so that he had thus secured undoubted osteological characters to go with the articles of clothing, &c., of the Salt Cave people, and he thought that we could, with little doubt, class this people among the more highly civilised and agricultural of the prehistoric races of America.

SCIENCE IN ITALY*

JUDGING from the number of scientific papers that we are in the habit of receiving from Italy, we are glad to infer that the restoration of political unity and freedom has also brought about a revival of that intellectual vigour which we are accustomed to associate with the names of Dante and Tasso, Galileo and Torricelli. When Italy was divided, and each State politically oppressed, her best men were in exile, and their best scientific work was expressed in a foreign tongue. Research was not only not encouraged, it was practically prohibited. It seems incredible, but it is nevertheless true, that the Austrian and Bourbon Governments, in their dread of novelty, would not allow the results of modern research to be taught in the schools. The text-books reproduced the exploded science of the past, in which the modern theory of dew, for example, was ignored; so that Melloni (whose best work was done in Paris, and its results published in French journals), in making a series of observations on the nocturnal cooling of bodies in the neighbourhood of Naples, wished to show that the laws of terrestrial radiation were the same in Italy as in countries where there was more political liberty. We have it on the authority of Matteucci, that he and others, when they revisited their native land, were placed under the surveillance of the police, not from the fear of their meddling with politics, but on account of the scientific reputation which conferred distinction upon them.

Under such circumstances science could not flourish, and the time has perhaps been too short since Italy recovered her freedom to enable her to do much more than revive the glories of the past, and to seek encouragement in the example of the great men who have gone before. Hence it is that in the papers before us, points are discussed in connection with objects of Italian discovery, such as the electrophorus and the condenser, in which old names are curiously mingled with new. Thus Beccaria, Æpinus, Priestley, Volta, and Avogadro are asso-

* "On Certain Principles of Electrostatics." A series of experiments. By Prof. G. Cautoni. "Su Alcuni Principi," &c. (Milan, 1873.)—"On Certain Controverted Points in Electrostatics." Note by the same. (Milan, 1873.)—"Important Observations of Beccaria on Electrical Condensers." By the same. Read before the Royal Society of Science and Literature of Lombardy, Feb. 20, 1873.—"On the Polarisation of Electrics." By the same. Read December 4 and 18, 1873.—"On the Limits of Resistance in Electrics." By the same. Read April 23, 1874.—"Experiments in Electrostatics." Parts 1 and 2. By the same. Read June 25 and Dec. 24, 1874.—"The Discoveries of Fusinieri; historical notes illustrated by an account of some of his instruments preserved in the Civil Museum of Vicenza." By G. Nardi. "Le Scoperte del Fusinieri," &c. (Vicenza, 1875.)—"The Theory of the Combination of Gases by means of Solids, as elaborated by Fusinieri, in 1824," &c. By G. Nardi. Read before the Academie Olimpica, 19th May, 1875. "La Teoria," &c. (Vicenza, 1875.)