

summaries of the different state sections of our Climatological Service of the Weather Bureau.

VOLCANIC ERUPTIONS AND RAINFALL.

THE eruption of Vesuvius draws attention once more to the supposed connection between rainfall and volcanic activity. Curiously enough, a recent number (Vol. III., No. 1) of the *Bolletino* of the Italian Meteorological Society contains a paper on this subject. It appears, from studies at Mt. Etna, that there is no evidence of any relation between the activity of the volcano and local rainfall. In this investigation both the daily variation in activity during the 1892 eruption, and the whole series of eruptions whose dates are accurately known, are taken into account.

R. DEC. WARD.

ENGLISH VITAL STATISTICS.

THE registrar-general's annual summary, giving the births, deaths and causes of death in London and other large towns in 1905, has just been issued. According to the abstract in the *London Times* the 76 great towns of England and Wales dealt with in the weekly returns for 1905 contained an estimated population of 15,609,377 persons in the middle of that year. The births registered in these towns in the period of 52 weeks ended December 30, 1905, numbered 438,360, and were equal to a rate of 28.2 per 1,000 of the population, the rates in the three preceding years having been 30.0, 29.7 and 29.1. The deaths registered in the same period numbered 244,840, and corresponded to a crude rate of 15.7 per 1,000, the rates in the three preceding years having been 17.4, 16.3 and 17.2. The death rate in 1905, calculated without reference to sex and age constitution of the populations, varied, as usual, considerably in the several towns, the lowest crude rate being 7.6 per 1,000 in Hornsey, and the highest, 22.1, in Merthyr Tydvil.

The 244,840 deaths at all ages included 61,279 of infants in their first year of life. In the 76 great towns infantile mortality, measured by the proportion of deaths under

one year to registered births, was 140 per 1,000, the mean proportion in the preceding three years having been 150. Smallpox was the cause of 51 deaths in the 76 towns. Of these 10 belonged to London, 7 to Bradford, 5 to Oldham, 4 to Southampton, 4 to Burnley, 4 to South Shields and smaller numbers to 11 other great towns. Measles was the registered cause of 6,058 deaths, which corresponded to a rate of 0.39 per 1,000 living at all ages. Scarlet fever caused 2,082 deaths, which corresponded to a rate of 0.13 per 1,000 living. Diphtheria (exclusive of croup unless stated to be membranous) was the stated cause of 2,528 deaths, corresponding to a mortality of 0.16 per 1,000 of the population. Whooping cough accounted for 4,507 deaths and for a mortality equal to 0.29 per 1,000 living at all ages. Continued fever, mainly enteric, was the registered cause of 1,252 deaths, equal to a rate of 0.08 per 1,000 of the population. Diarrhoea (including dysentery and English cholera) accounted for 12,877 deaths at all ages, and for a death rate of 0.83 per 1,000 of the population.

The marriages in London during the year 1905 numbered 39,631, corresponding to a rate of 16.9 persons married per 1,000 of the population at all ages. This rate was 0.1 per 1,000 below the corresponding rate in 1904, and was 1.0 per 1,000 below the average rate in the ten years 1895-1904. In the year 1894 the marriage rate was 17.0; from that date it gradually rose to 18.8 in the year 1898, since which year it has declined almost continuously to its present level. The number of births registered in London during the 52 weeks ended December 30, 1905, was 126,620. In proportion to the total population of both sexes and all ages, these births were equal to a rate of 27.1 per 1,000. The birth rate in 1905, calculated in this way, was 0.8 per 1,000 below that in 1904, and was 2.2 per 1,000 below the average in the ten years 1895-1904. In the year 1895 the birth rate was 30.6 per 1,000, showing an increase on the rate in the previous year. Since that date, however, the birth rate has gradually decreased, the rate in the year 1905 being the lowest on record. The

deaths recorded as belonging to London during the year 1905 numbered 70,442, and were equal to a rate of 15.1 per 1,000 of the estimated population; this is the lowest death rate in London since civil registration was established. It was 1.0 per 1,000 below the corresponding rate in 1904, and no less than 2.7 per 1,000 below the corresponding average rate in the ten years 1895-1904.

THE CONGRESS OF THE UNITED STATES.

May 11.—Mr. Smith, of California, introduced a bill (H. R. 19,234) for the protection of animals, birds and fish in the forest reserves of California. Referred to the House Committee on Public Lands.

Mr. Campbell, of Kansas, from the Committee on the District of Columbia, to which was referred the Bill of the House (H. R. 13,193) to prohibit the killing of wild birds and other wild animals in the District of Columbia, reported the same with amendment, accompanied by a report (No. 4,207); which were referred to the House Calendar.

THE CALIFORNIA ACADEMY OF SCIENCES.

THE most serious loss sustained by science in many years is the destruction of the California Academy of Sciences by the recent earthquake and fire in San Francisco. Two letters recently received from officers of the institution giving interesting details regarding the destruction of the academy are worthy of record as a part of the history of scientific work on the Pacific Coast. In addition to their general interest, they will appeal particularly to those who have enjoyed the hospitality of the academy which for years has been the gathering place and headquarters of scientific men visiting the west coast.

The first is from Mr. Leverett Mills Loomis, director of the academy, to whose initiative, energy and devotion were largely due its increasing growth and activity during the last few years, and upon whom now largely devolves the important duty of reorganizing and placing it on a sound working basis. Mr. Loomis was living within the burned area not far from the academy and in addition to his

efforts for that institution was obliged to rescue from the advancing flames a helpless invalid father. He writes:

I got down to the academy about 7 A.M. and found the bridge connecting the two buildings gone and the museum stairs badly wrecked. I managed to climb up to the top floor and got all the records together, and began to get them down when Miss Hyde [the librarian] came to my aid. Together we saved all the records. Miss Hyde also saved the MS. of Mr. Hittell's history of the academy. Later Dr. Van Denburg [curator of reptiles] came and got out most of the reptile types. Then Miss Eastwood came with a friend and saved the greater part of the plant types. Miss Hyde also saved most of the insect types. Meanwhile the fires started by the earthquake were closing in on the academy. The pioneer building and the Emporium [both buildings joined the academy] were burning when I paid my visit to the Department of Ornithology. As a starter for the bird collection, I secured the type of *Oceanodroma macrodactyla*, and as the beginning of the bird library I took Des Murs' *Iconographie*. As I wanted to be the first donor to the academy's ornithological library, I put Brown's illustrations under my arm as I passed the store room where my books were kept. So you see we had made a beginning before the end had come. The work accomplished by the Galapagos expedition has exceeded our most sanguine expectations. Among the treasures are a series of Darwin's rail and tortoises from islands where they were supposed to be extinct. The Galapagos collections will form a foundation of our new museum of the greater academy. Our plan of action is fully worked out. *The library is the hardest thing to replace*; the books will come slowly, but they will come. Have found good quarters and am now pushing the reorganization.

The other letter is dated Berkeley, California, May 7, 1906, and is from Miss Alice Eastwood, curator of botany of the academy. Miss Eastwood has been in charge of the academy herbarium for the last twelve years. Her devotion to the work has been shown in many ways, even to the extent of using a large part of her salary as curator in the employment of assistants. The collection contained a considerable number of plant types and during the past year Miss Eastwood had been segregating them from the general collection