

Welle, Nachtigal was the first to give some new information. In 1875 he published a map from his surveys and from information obtained in Dar For and Wadai. Junker explored, in 1876 and 1877, the western tributaries of the Bahr-el-Abiad. In the same years a Greek physician, Panagiotis Potagos, travelled over a great part of the district. As, however, he made no astronomical observations, and his itinerary is very primitive, the results of his journey are not reliable. This is still more the case with Bohndorff's journeys. This man, a goldsmith, who had been in the service of General Gordon, travelled in the region of the head waters of the Welle. Later on, when Junker started on his second journey, he took Bohndorff for his servant, and in January, 1880, they left Khartum. The first summer was spent in the Niam-Niam country, and since that time Junker has travelled in Mombuttu and in the district of the Welle and the other rivers running west. Lupton Bey and his agents made many important journeys, the expedition of Rafai Aga being of particular interest. He is said to have reached the lake on the Lokoi. The north-western tributaries of the Bungu, as shown on the sketch-map, are from Flegel's reports, who learned about them on his journey in Adamaua. The central part between the regions traversed by Flegel, Nachtigal, and Junker, is still totally unknown.

THE HEALTH OF NEW YORK CITY DURING JANUARY.

THE population of New York City at the beginning of 1887 may be approximately stated to have been 1,461,466. The deaths during the month of January from all causes were 3,507, which is but 5 more than during the preceding month, although the population was greater by more than 3,000. Of this number, 140 died on the 5th, the greatest mortality of the month (see page 228). Diarrhoeal diseases caused 48 deaths, a reduction of 17 as compared with December, and the lowest mortality from this cause since March, 1886. The deaths of children under five years of age amounted to 1,523, differing but little from the preceding month. Consumption caused 524, diphtheria 204, and scarlet-fever but 46 deaths. The mortality from the last-named disease was double that of December. In November there were recorded 166 deaths as due to measles. In December this increased to 271, and in January the mortality rose to 294, exceeding by no inconsiderable figure the combined deaths from diphtheria and scarlet-fever, emphasizing, what we have already directed attention to, that measles is not a trivial disease, but one in regard to which all precautions

relating to isolation and disinfection should be promptly and thoroughly taken and maintained.

The maximum temperature of the month, 62° F., was reached at 4 P.M. on the 23d. This was nearly ten degrees above the average for the past ten years. The lowest point reached by the mercury was 4° F., at 12 P.M. on the 18th, and again on the 19th at 2 A.M. The average for the decade is 3.1° F., although during the same month of 1879 it fell to -4° F., and in 1882 to -6° F. The rainfall for January was 4.42 inches, included in which are 6.625 inches of snow. The average rainfall for this month for the ten years commencing 1878 is 3.82 inches, so that more than the average fell during January. The largest amount of snow which fell during this period in the same month was 17.5 inches, in the year 1882. Since then, in but one year, 1885, has less snow fallen than during January of 1887: the average has been nearly 10 inches. There were four snow-storms during the month. In that which occurred on the 5th and 6th, 2 inches fell; that of the 9th and 10th resulted in a fall of 4 inches; while the others were insignificant.

GEOGRAPHICAL NOTES.

Africa.

Dr. Hans Schinz gives the following report of the present state of Lake Ngami. The lake has not dried up, but is gradually decreasing in size. The Okavango, or Ombuenge, forms, north-west of the lake, an extensive swamp, and during the dry season the lake receives only a small quantity of water from it. During the rainy season, however, the small brooks swell up and form a large stream, which empties itself into the lake. The Tamulakan, which branches off from the Ombuenge in latitude 18° 40' S., empties itself into the Botelet, not into the Zambezi.

Gottl. Ad. Krause has succeeded in entering the territory south of Timbuktu. Since Barth's expedition in 1853, no white man has visited this district. On the 7th of July, Krause left the large city of Salaga on the Volta, and later on reached Mosi, whence he started on Oct. 26 for Timbuktu. The district through which he has travelled has been known only through information obtained by Barth. Our knowledge of the district between the fabulous Kong Mountains and the most northern part of the Niger is still extremely imperfect, being founded only on information obtained from natives.

Under the auspices of the secretary of state of France, Camille Douls is going to explore the Wad Draa, which empties itself near Cape Noon. This periodical river runs at some distance along the