till October 2nd, making a period of 137 consecutive days without rain. The total fall of rain for the year was 17·42 inches, being 9·66 inches below the average of 40 years—viz., 1861 to 1900 inclusive. The number of days on which rain fell was 40, being 15 less than the average.

RESULTS OF METEOROLOGICAL OBSERVATIONS TAKEN AT TIBERIAS IN THE YEAR 1901.

By JAMES GLAISHER, Esq., F.R.S.

THE numbers in column 1 of this table show the highest reading of the barometer in each month. The highest appear in the winter, and the lowest in the summer months. The maximum for the year was 31·170 inches, in January, and the next in order 30·988 inches, in December.

In column 2, the lowest reading in each month is shown. The minimum for the year was 30·175 inches, in July, and the next in order 30·200 inches, in August.

The range of readings in the year was 0·995 inch. The range in the morning observations was 0·886 inch, being 0·348 inch greater than the range at Jerusalem.

The numbers in the 3rd column show the extreme range of readings in each month. The smallest was 0·217 inch in September, and the next in order was 0·313 inch, in August; the largest was 0·656 inch, in January, and the next in order 0·637 inch, in December.

The numbers in columns 4 and 5 show the mean monthly reading of the barometer at 8 a.m. and 4 p.m., and in column 6 the amount by which the reading at 4 p.m. is lower than at 8 a.m.; the smallest difference between these two readings was 0·074 inch, in August, and the next in order 0·077 inch, in April; the largest was 0·110 inch, in both September and October, and the next in order 0·104 inch, in November. In England, in January, the readings at 8 a.m. and 4 p.m. are practically the same, in all other months the reading at 4 p.m. is lower than at 8 a.m.; the greatest difference is 0·025 inch, in June. The mean for the year at Tiberias was 0·089 inch, being about four times greater than in England.

The numbers in column 7 show the mean monthly pressure of the atmosphere: the highest was 30·769 inches, in January, and the next in order 30·758 inches, in February; the lowest was 30·347 inches, in July, and the next in order 30·366 inches, in August. The mean for the year was 30·582 inches.

The highest temperature of the air in each month is shown in column 8. The first day in the year the temperature reached 90° was on March 27th, and the temperature reached or exceeded 90° on 3 other days in this month; in April on 7 days; in May on 10 days; in June, July, August, and September it reached or exceeded 90° on every day; in October on 19 days; and in November on 2 days; thus the temperature reached or exceeded 90° on 164 days during the year. At Jerusalem the temperature did not reach 90° until March 31st, and there were only 29 days in the year on which the temperature was as high as 90°. At Tiberias the temperature was 104° on March 29th, and reached 100° on 1 other day in this month; in April on 2 days; in May on 2 days; in June on 6 days; in July on 15 days; in August on 14 days; in September on 4 days; and in October on 1 day; thus on 46 days in the year the temperature reached or exceeded 100°. The highest temperature in the year at Tiberias was 108°, on both June 1st and July 8th; at Jerusalem it was 98°, on August 30th.

The lowest temperature of the air in each month is shown in column 9. The lowest in the year was 34°·0, in January, on the 18th, and this was the only night during the year on which the temperature was as low or lower than 40°, the next in order was 41°, on January 17th. At Jerusalem the lowest in the year was 31°, on January 18th; and there were 18 nights during the year at Jerusalem on which the temperature was as low or lower than 40°.

The yearly range of temperature was 74°·0; at Jerusalem it was 67°·0.

The range of temperature in each month is shown in column 10, and these numbers vary from 26°, in December, to 57°, in March. At Jerusalem the range varied from 29°, in January, to 45°·9, in both March and April.

In column 11 the mean of all the high day temperatures in each month is shown. The lowest was 63°·4, in January, being 13°·2 higher than that at Jerusalem, and the next in order were 72°·3, in December, and 75°·4, in February; the highest was 99°·8, in August, and the next in order were 99°·5, in July, and 96°·6, in September.

At Jerusalem the highest were 86°·1, in both July and August, and 84°·9, in June. The mean for the year at Tiberias was 85°·4; at Jerusalem it was 73°·1.

In column 12 the mean of all the low night temperatures in each month is shown. The lowest was 49°·1, in January, and the next in order were 56°·4, in February, and 57°·1, in December; the highest was 78°·1, in August, and the next in order 75°·7, in both July and September. At Jerusalem the lowest were 39°·2, in January, 47°·9, in December, and 49°·3, in February; the highest were 66°·7, in July, 65°·8, in August, and 63°·3, in June. At Tiberias the mean for the year was 65°·5; at Jerusalem it was 55°·7.

In column 13 the mean daily range of temperature is shown in each month. The smallest was 14°·3, in January, and the next in order were 15°·2, in December, and 17°·6, in November; the greatest was 23°·8, in July, and the next in order were 23°·2, in June, and 21°·8, in April. At Jerusalem the smallest were 11°·0, in January, 12°·4, in December, and 13°·5, in November; and the greatest were 21°·6, in June, 20°·5, in September, and 20°·3, in August. At Tiberias the mean daily range for the year was 19°·9; at Jerusalem it was 17°·4.

The mean temperature of the air, as found from the maximum and minimum temperatures only, is shown in each month in column 14. The lowest was 56°·2, in January, and the next in order 64°·7, in December, and 65°·9, in February; the highest was 89°·0, in August, 87°·6, in July, and 86°·2, in September. At Jerusalem the lowest mean temperatures were 44°·7, in January, 54°·1, in December, and 57°·2, in February; the highest were 77°·4, in July, 76°·0, in August, and 74°·1, in June. At Tiberias the mean temperature increased month by month to the maximum in August, then decreased month by month to the end of the year. At Jerusalem the mean temperature increased month by month to the maximum in July, then decreased month by month to the end of the year. At Tiberias the yearly value was 75°·5; at Jerusalem it was 64°·4.

The numbers in the 15th and 16th columns are the mean readings of a dry and wet bulb thermometer, taken daily at 8 a.m. If those in column 15 be compared with those in column 14, it will be seen that those in column 15 were a little higher in March, and a little lower in all other months. The mean reading of the dry-bulb for the year was 73°·3, and that of the mean temperature

75°·5, and therefore the mean temperature of the year may be approximately determined by a single reading of the thermometer taken daily at 8 a.m.

The numbers in the 17th column are the temperature of the dew-point, or that temperature at which the air would be saturated by the quantity of vapour mixed with it. The smallest difference between these numbers and those in column 15 was 12°·3, in January, and the largest 20°·8, in October.

The numbers in column 18 show the elastic force of vapour, or the length of a column of mercury in inches corresponding to the pressure of vapour. The smallest was 0·272 inch, in January, and the largest 0·769 inch, in September.

In column 19 the weight in grains of the water in a cubic foot of air is shown. It was as small as 3°·1 grains in January, and as large as 8°·2 grains in August.

In column 20 the additional quantity of vapour required to saturate a cubic foot of air is shown. It was as small as 1°·8 grains in January, and as large as 5°·3 grains in October.

The numbers in column 21 show the degree of humidity of the air, saturation being represented by 100. The largest number is 63 in both January and November, and the smallest 49 in both March and October.

The numbers in column 22 show the weight in grains of a cubic foot of air, under the mean atmospheric pressure, temperature, and humidity of the air. The largest number was in January, decreasing to the smallest in August, then increasing again to the end of the year.

In columns 23 and 24 are the mean readings of a dry and wet-bulb thermometer taken daily at 4 p.m. By comparing the numbers in column 15 with those in column 23, the increase of temperature from 8 a.m. to 4 p.m. is shown. In March the increase was 7°·1, and in October was as much as 9°·6.

In column 25 the temperature of the dew-point at 4 p.m. is shown. By comparing these numbers with those in column 17, it will be seen that the temperature of the dew-point in the months of January, February, March, April, August, September, October, November, and December was higher than at 8 a.m., and lower than at 8 a.m. in all other months. The numbers in this column are smaller than those in column 23 by 14°·5, in January, increasing to 29°·5, in June, then decreasing to 16°·5, in December.

On several days during the months of April, May, June, July, and August, at 4 p.m., the reading of the dry-bulb thermometer exceeded that of the wet by 20° or more, and on three days—viz., May 1st, June 1st and 15th—was more than 25° in excess of the wet-bulb reading. The temperature of the dew-point on these days is shown by the following table:—

Month and Day.	Reading of		Temperature of Dew-Point.	Temperature of Dew-Point below Dry.
	Dry.	Wet.		
	°	°	°	°
May 1	96·0	70·0	54·8	41·2
June 1	102·0	75·0	62·7	39·3
„ 15	100·0	75·0	60·9	39·1

In column 26 the elastic force of vapour is shown, and by comparing the values with those in the same month at 8 a.m., we find that it was smaller at 4 p.m. in the months of May, June, and July, and larger than at 8 a.m. in the remaining months.

In column 27 the amount of water in a cubic foot of air at 4 p.m. is shown. The amount was less than at 8 a.m. in the months of May, June, and July, of the same value in November, and larger than at 8 a.m. in the remaining months.

In column 28 the amount of water required to saturate a cubic foot of air was as large as 9°·6 grains, in June, and as small as 2°·5 grains, in January.

In column 29 the degree of humidity is shown. The driest months are from April to November, the value for these months varying from 38, in June, to 50, in both August and September.

In column 30 the weight of a cubic foot of air is shown. The smallest was 504 grains, in August, and the largest 545 grains, in January.

In column 31 are given the number of days of rain in each month. The greatest number was 8 in January. The total number in the year was 26. At Jerusalem rain fell on 40 days.

In column 32 the monthly fall of rain is given. The heaviest fall of rain on one day in the months from January to April was 2·32 inches, in January, on the 15th, and the next in order

2·29 inches, on January 16th, and 1·34 inch on the 18th. No rain fell from May 17th till October 5th, making a period of 171 consecutive days without rain. The fall of rain on December 2nd was 2·30 inches, and on the 3rd 1·57 inch fell. The heaviest monthly fall in the year was 8·43 inches in January, and the next in order 4·69 inches in December. The total fall for the year was 15·33 inches. At Jerusalem the total fall for the year was 17·42 inches.

ARCHÆOLOGICAL AND EPIGRAPHIC NOTES ON PALESTINE.

By Professor CLERMONT-GANNEAU, M.I.

17. *The Site of Mêpha'ath.*—Some time ago[1] I endeavoured to point out that the name of the biblical city Mêpha'ath, which had hitherto been sought in vain, had survived to the fourteenth century of our era among the ancient Arab geographers with its old name faithfully preserved under the form *Meifa'a*, a village of el-Belḳa, or Moab. In the course of my discussion I argued that in consequence of this there was every chance that the name, although wanting in our maps, might still be traditionally preserved, and that a careful search in the district of Hesbân might not fail to lead to its re-discovery, and at the same time might determine the exact locality of this Levitical city. Events were not long in proving the justice of my remarks, since, as a matter of fact, I now notice in a short itinerary quite recently published by Dr. Alois Musil,[2] comprising the country of Hesbân and the frontier of Moab, a place-name which appears to me to be the required toponym: *Nêfa'*.[3] The name has merely undergone a slight alteration (N = M) in the mouth of the Bedawin, of which the vulgar dialects of Syria offer us more than one example.[4] It is there,

[1] *Recueil d'Archéologie Orientale*, t. IV, p. 57, *seq.*; compare *Quarterly Statement*, 1902, p. 10.

[2] *Kŭsejr 'Amra und andere Schlœsser œstlich von Moab* (Vienna, 1902), p. 2 of the annexed fly-leaf.

[3] A printer's error, to be corrected into Nêf'a, as explained below, p. 261, note 2.

[4] The change might have been somewhat influenced by a popular etymology tending to associate the place-name in question with the frequently used root