

it until after the Mohammedan reoccupation, when many Christian dwellings were already become ruinous and deserted; yet Benjamin of Tudela, *circa* 1165, found two hundred dwelling "in one corner of the city, under the Tower of David." Perhaps these were only a portion of the Jewish population, allowed to live in that locality for the convenience of carrying on their occupation of dyeing. The origin of the singular custom of *handing over to the Jews the keys of the city for a few hours on the accession of a new Sultan* is also shrouded in much obscurity. It is said to be connected with the Rabbinic laws relating to the Sabbath boundary ערב, *Erüb*, and the opinion of the Rabbis of Jerusalem is that it dates from "the time of the Talmud." They affirm that after the Babylonian Captivity (!) the Jews of Jerusalem always endeavoured to obtain the keys of the city gate when a new monarch came to the throne, and to place them in the hands of the Chief Rabbi for a short time, the object being to acquire possession of the city by right of purchase, as it were (for they always had to pay for the privilege), in order that they might legally allow their people to pass and carry objects on the Sabbath from house to house and street to street without infringing the law of Exod. xvi, 29. A friend informs me that on the accession of the present Sultan the Jews applied to the Pasha for the keys and were refused, that they then succeeded in obtaining them from the military authorities who have them in charge, and that the Pasha, who was very angry when he found out what had occurred, was pacified on its being explained that the custom was merely a religious ceremony. Probably the usage arose after the expulsion of the Crusaders, and when the Jews began to spread beyond the limits of their old confined quarter. Modern Eastern Rabbis, like the Rabbis who wrote the Talmud, frequently display a lofty disdain of historical accuracy, and by "after the Babylonian Captivity" we may understand the much later period when Jews of the dispersion began to turn from Babylon westward, and many doubtless took up their residence in Jerusalem.

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METEOROLOGICAL OBSERVATIONS.

SARONA 1882.

THE numbers in column 1 of this table show the highest reading of the barometer in each month; of these, the highest are in winter, and the lowest in the summer months. The maximum for the year was in February, viz, 30·249 ins.; in both the years 1880 and 1881 the maximum was in January. In column 2, the lowest in each month are shown; the minimum, 29·545 ins., was in July; in 1880 the minimum was in April, and in 1881 in February; the range of readings in the year was 0·704 inch, being about the same as in the two preceding years. The numbers in the 3rd column show the range of reading in each month; the smallest was in

August, viz., 0·171 inch, and the largest in February, being somewhat more than half an inch, the least and greatest ranges in the two preceding years being about the same values. The numbers in the 4th column show the mean monthly pressure of the atmosphere; the greatest, 30·060 ins., was in January, and the smallest, 29·689 ins. in July; in the years 1880 and 1881 the greatest was in January, as in this year, the smallest in 1880 was in July, and in 1881 in August.

The highest temperature of the air in each month is shown in column 5. The highest in the year was 93°, but which high point was not reached till November 1st; in 1880, the maximum temperature of the year was 103°, on May 23rd, and in 1881 the maximum temperature was 106°, on August 27th. The first day in the year 1882 the temperature exceeded 90° was on the 24th of September, and only on one other day in the month it rose to 90°; in October there were four days when the temperature reached and exceeded 90°; and in November two such days, the highest 93°, took place on the 1st; therefore the temperature reached and exceeded 90° on only eight days in the year; in the year 1880 the temperature exceeded 90° on 36 days, and in 1881 the temperature rose to and exceeded 90° on 27 days.

The numbers in column 6 show the lowest temperature of the air in each month; in January it was as low as 34° on the 30th, and below 40° on eight other nights in the month; in February it was below 40° on four different nights, and in March on one night; therefore the temperature was below 40° on 14 nights in the year; in the year 1880 the temperature was as low as 32° on two nights in January and one in February; and below 40° on 13 other nights, and in 1881 it was below 40° on only two nights; the lowest experienced was 39° on the 6th and 7th of December. The yearly range of temperature was 59°, the range in 1880 was 71°, and in 1881 was 67°. The range of temperature in each month is shown in column 7, and these numbers vary from 25° in August to 47° in November; in 1880 these numbers vary from 25° in August to 53° in both April and May, and in 1881 from 29° in July and September to 51° in May.

The mean of all the highest by day, of the lowest by night, and of the average daily ranges of temperature, are shown in columns 8, 9, and 10, respectively. Of the high day temperature, the lowest was in February, 55°·7; and the highest in September, 87°·2. Of the low night temperature the coldest, 43°·7, took place in January, and the warmest, 68°·7, in August. Both the high day temperature and the low night temperature were very low throughout the year. The mean daily range of temperature in each month are shown in column 10, the smallest was in February, 11°·7, and the largest in October 22°·7.

In column 11, the mean temperature of each month, as found from observations of the maximum and minimum thermometers only are given, the month of the lowest temperature was February, 49°·8; in 1880 the month of the lowest temperature was January, 50°·7; and in 1881 was February, 56°·2. The highest was August, 78°·6; in 1880 and 1881 the months of the highest was also in August, as in this year, and the numbers

were 79° and $80^{\circ}\cdot 1$ respectively. The mean temperature for the year was $65^{\circ}\cdot 5$, and of the preceding years, viz., 1880 and 1881, were $66^{\circ}\cdot 4$ and $66^{\circ}\cdot 7$ respectively; the year was cold, and the months of January, February, May, and June were remarkably cold.

The numbers in columns 12 and 13 are the monthly means of a dry and wet bulb-thermometer, taken daily at 9 a.m., and in column 14 the monthly temperature of the dew-point, or that of the temperature at which dew would have been deposited. The elastic force of vapour is shown in column 15, and in column 16 the water present in a cubic foot of air; in January and February this was as small as $3\frac{1}{2}$ grains, whilst in July, August, and September it was as large as $7\frac{1}{2}$ grains. The numbers in column 18 show the degree of humidity, saturation being considered 100; the smallest number in this column was in October, and the largest in February. The weight of a cubic foot of air under its pressure, temperature, and humidity, at 9 a.m., is shown in column 19.

The most prevalent wind in January was S., and the least prevalent winds were N. and W. In February the most prevalent was S., and the least were W. and N.W. The most prevalent in March was S., and the least were N., N.E., and N.W. In April the most prevalent was S.W., and the least prevalent were N.E. and E. In May the most prevalent were S.W., and W., and the least prevalent were N.E. and S.E. In June the most prevalent were S.W. and W., and the least were N.E. and S.E. In July the most prevalent was S.W., and the least were S., S.E., N., and its compounds. In August the most prevalent was W., and the least E. and N.E. In September the most prevalent was S.E., and the least was E. and its compounds. In October the most prevalent was S.W., and the least was N.E. In November the most prevalent was S.W., and the least were N. and N.W., and in December the most prevalent was S.W., and the least were S. and S.W.

The most prevalent wind for the year was S.W., which occurred on 119 times during the year; of which 24 were in July, 15 in November, and 14 in September; and the least prevalent wind for the year was N.E., which occurred on only 12 times during the year, of which 4 were in January, 3 in both February and November, and 2 in December.

The numbers in column 29 show the mean amount of cloud at 9 a.m.; the month with the smallest amount is June, and the largest February. Of the cumulus, or fine weather cloud, there were 81 instances in the year; of these there were 18 in July, 16 in August, and 15 in September, and 3 only both in January and February. Of the nimbus, or rain cloud, there was 90 instances in the year, of which 16 took place in February, 13 in January, and 12 in both May and December, and 4 only from July to October. Of the cirrus, there were 44 instances in the year. Of the stratus there were 40 instances. Of the cirro-cumulus there were 32 instances. Of the cirro-stratus there were 21 instances in the year, and there were 57 instances of cloudless skies, of which 11 were in October, and 8 in both January and June.

The largest fall of rain for the month in the year was in February, 7·22 ins., of which 1·02 inch fell on the 5th, 0·92 inch on the 10th, and 0·89 inch on the 4th. No rain fell from May 25th till October 20th, with the exception of one day, which was August 10th, when 0·35 inch fell, and so making two periods of 76 and 70 consecutive days without rain. In the year 1880, no rain fell from the 2nd of May till the 18th of October, making a period of 168 consecutive days without rain; and in 1881 no rain fell from April 20th to November 6th, making a period of 189 consecutive days without rain. The fall of rain in the year was 22·09 ins., being 6·59 ins. less than in 1880, and 4·60 ins. more than in 1881. The number of days on which rain fell was 62, while in 1880 rain fell on 66 days, and in 1881 on 48 days during the year.

JAMES GLAISHER.

THE HOLY SEPULCHRE AND THE DOME OF THE ROCK.

THE value of the "Palestine Pilgrims' Texts" are already becoming evident in many ways, and the intentions of those who projected their publication are being fully realised. Whoever reads Professor Hayter Lewis' admirable work on "The Holy Places of Jerusalem," will see the advantages to be derived from the material they contain. I wish here to acknowledge my indebtedness to them upon a point of some importance connected with the topography of Jerusalem. As far back as January, 1879, a short article of mine appeared in the *Quarterly Statement* entitled "Transference of Sites." In that article will be found described what seemed to me to be some very marked points of resemblance between the Holy Sepulchre and the Dome of the Rock, and the strong probability that the one structure was copied from the other. In Mukaddasi, an Arabic author, whose date is given as about 985 A.D., lately published by the Palestine Pilgrims' Text Society,¹ I find the following passage. The author is describing the Mosque at Damascus—"Now one day I said, speaking to my father's brother, 'O, my uncle, verily it was not well of the Khalif al Walid to expend so much of the wealth of the Muslims on the Mosque at Damascus. Had he expended the same on making roads, or for making caravanserais, or in the restoration of the fortresses, it would have been more fitting and more excellent of him.' But my uncle said to me in answer, 'O, my little son, you have not understanding! Verily Al Walid was right, and he was prompted to do a worthy work. For he beheld Syria to be a country that had long been occupied by the Christians, and he noted herein the beautiful churches still belonging to them, so enchantingly fair, and so

¹ Translated from the Arabic and annotated by Guy Le Strange.