

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.

renowned for their splendour : even as are the Kumâmah¹ [the church of the Holy Sepulchre] and the churches of Lydda and Edessa. So he sought to build for the Muslims a mosque that should prevent their regarding these, and that should be unique and a wonder to the world. And in like manner is it not evident how the Khalif, 'Abd al Malik, *noting the greatness of the Dome of the Kumâmah and its magnificence, was moved lest it should dazzle the minds of the Muslims, and hence erected, above the rock, the Dome which now is seen there.*"² The italics in the above are here given to show the words which apply to the case in point.

Mr. Fergusson's theory was that the Dome of Rock was the original Holy Sepulchre, and that its transference to its present site took place in the eleventh century ; Mukaddasi writes in the tenth century, and says that the Dome of the Rock was built as a rival to the Holy Sepulchre.

The quotation from Mukaddasi disposes at once of this part of Mr. Fergusson's theory.

Mukaddasi's words do not affirm that the one building was copied from the others, but they permit of that inference. This inference is justified, I think, from the resemblance between the two monuments. Before the marble was built round the Holy Sepulchre, to form the chapel as we see it now, the rock must have stood up under the dome, thus presenting a striking resemblance to the Sakhra. Having realised this identification, it appeared to me, from the arrangement of the pillars supporting the dome of the sepulchre, of which we have the original design still remaining on the western side, that the number was probably twelve, the same as there is under the Dome of the Rock. This was a lucky guess on my part, but I am able now to confirm it by a number of references. The earliest is from Eusebius ; he mentions the "rock standing out erect and alone on a level land, and having only one cavern within it ;"³ and also that the dome "was encircled by twelve columns [accord-

¹ Al Kumâmah, literally "The Dunghill." This is a designed corruption on the part of the Muslims of "Al Kayâmah"—"anastasis," the name given to the Church of the Resurrection (the Holy Sepulchre) by the Christian Arabs.

² Page 22.

³ Willibald describes the rock at the time of his visit, A.D. 722 : "The rock is now above ground, square at the bottom, but tapering above, with a cross on the summit." Arculf, who is about the same date as Willibald, says that "the whole is covered with choice marble to the very top of the roof, which is adorned with gold, and supports a large golden cross." Arculf may possibly have meant that it was the inside that was covered with marble, otherwise it is difficult to reconcile these two authorities. Antonius Martyr, date 560-570, describes—"The tomb itself, in which the body of Our Lord Jesus Christ was laid, is cut out of the natural rock." These all indicate that the rock was visible in these early days. In the present day the whole tomb outside and inside is so covered with marble that no ordinary pilgrim would be aware of the existence of the rock.

ing to the number of the Apostles of our Saviour], having their capitals embellished with silver bowls of great size, which the Emperor himself presented as a splendid offering to his God." Following this we have Arculf's testimony—"the round church of our Saviour's Resurrection, encompassed with three walls, and supported by twelve columns." In the Palestine Pilgrims' Texts we have now the account by the Abbot Daniel,¹ who visited Jerusalem 1106-7, and he mentions the "twelve monolithic columns." In addition to these authorities we have evidence that these columns still exist; in 1867, while some repairs were being made, the Austrian Consul saw one of them; it was much damaged by the action of fire, which was probably the reason that they were all built up, and now present the form of square piers.

For the present, or at least till better evidence may be found, Mukaddasi's testimony has to be accepted. Still, the knowledge we obtain from him leaves much unexplained. A natural question at once presents itself as to why Abd al Malik, or his architects, selected a tomb as their model for the Dome of the Rock. More than one guess presents itself to the mind, but data is wanting to support them. There is a faint tradition which locates the tomb of Solomon at the spot; this could scarcely have been the motive, because if it had the name of such a celebrity would have in all probability come down to us, in a very prominent form, connected with the building. It might have been that as there was a Sacred Rock to build over, Abd al Malik's architects merely copied the Holy Sepulchre, because it also had a rock. The notion that I feel most inclined to regard as having produced the influence was that, the Holy Sepulchre being looked upon as the "centre of the world," and as the Mohammedans considered the Sakhra as the centre, they constructed a rival dome to eclipse the other. Much might be said in favour of this explanation, and yet, after all that could be brought forward, I confess that it would lead to nothing more than a theory.

The resemblance between the two buildings is most striking; in both cases there is a rock with a cave in each; over this each has a dome, supported by twelve columns. The columns of the Dome of the Rock are said to represent the twelve sons of Jacob; those in the Holy Sepulchre are according to the twelve Apostles. The architecture of the two is very different; it is only in the arrangement of the two buildings that similarity is found. This similarity harmonises with the statement of Mukaddasi. It also confirms one of Mr. Fergusson's conclusions, which he insisted strongly upon—namely, that the Dome of the Rock was a structure in the form of an Oriental tomb. That it was a tomb we have as yet no evidence; no tradition has as yet turned up that anyone has been buried in the cave. The position of Solomon's tomb is not located in the cave, but at a point near to the north doorway.

Dr. Chaplin has called my attention to the Church of the Ascension on the Mount of Olives, which, he points out, is also built on exactly the

¹ "Palestine Pilgrims' Texts."

same plan as the Anastasis.¹ It should also be recalled that the Holy Sepulchre has been the model for a large number of churches in all parts of the Christian world, which are round in form, our Temple Church being one of the well-known examples.

WILLIAM SIMPSON.

THE ALPHABET.

THE derivation of all modern alphabets of Asia and Europe, from the early script of Syria and of Asia Minor, and the derivation of the earliest script from a hieroglyphic system, are facts generally accepted by scholars. That the hieroglyphic system in question was the Egyptian is a very generally received opinion, but objections have been raised to it for several reasons. First, it is urged that the origin of the alphabet should be sought in Asia, where it first appears. Secondly, that the proposed Egyptian equivalents do not resemble the Phœnician or Greek letters, and bear no reference to the names of these letters; and, third, that De Rougé's comparisons are in several cases arbitrary and deficient in principle.

Dr. Isaac Taylor, while developing De Rougé's theory on this subject, has nevertheless stated that a derivation from the so-called Hittite is not perhaps impossible. There is a very strong reason for supposing such a derivation, which briefly is as follows:—The Greek alphabet and the earliest alphabet of Italy contain letters in addition to those of the Phœnician. The Asia Minor alphabets contain even more letters than the Greek. Thus, in Phœnicia, we have only 22 letters, in Greece 27, and among the Carians and Lycians about 30 and 33 letters respectively.

Dr. Sayce has suggested that these additional letters come from the old syllabary, which survived in Cyprus and in Egypt down to the days of Alexander the Great. But, generally speaking, antiquaries do not admit the possibility of a system of writing being made up from different sources. Thus we do not use Hebrew letters interspersed with the Latin, or even running hand with Roman. If then part of the alphabet came from the old syllabary of Asia Minor, it seems most probable that in this syllabary we should seek for the origin of the whole alphabet.

In addition to this consideration there are others which tend to a similar result. The Greeks in the southern islands took, it is true, 20 of the 22 Phœnician letters, and as a rule preserved the Semitic name of the letter and preserved the Semitic order. The Italian tribes, however (Etruscans, Oscans, Umbrians, &c.), did not apparently use these names,

¹ This Church is round, or, to be more exact, it is octagonal, and wants the twelve pillars; but it has a rock, with a footprint on it—said to be that of the Saviour. The Sakhra has also a footprint on it—said to be that of Mohammed's, and made by him when he ascended upwards on his celebrated night journey.