

found to reappear along sections of the wall which, just as here between T. III and T. VII, were far away from the caravan route, and where consequently it was manifestly impossible that it was of modern origin. On the other hand, it was easy to account for its preservation in those particular places. The track was to be found only where the actual line of the wall had suffered less from erosion, and the same local circumstances, such as relatively low ground less exposed to the full force of the winds and direction parallel to that in which they usually blow, would account for the survival of both wall and track.

All the same I might have hesitated about adopting this simple explanation, had I not had such abundant occasion to convince myself of the remarkable persistence with which this gravel soil of an arid desert, so rarely affected by rain or snow-fall of any extent, retains all impressions such as footprints or wheel-tracks. Frequently the latter were found running to depressions which may at one time have afforded some grazing or fuel, but where both these inducements to visits on the part of the cart-loving cultivators or herdsmen from the Tun-huang oasis must have disappeared for many years past. Yet the tracks left even by a single vehicle which had thus crossed the Sai were usually quite clear and continuous. And here I may note at once that when in 1914 I moved again over this ground, I found particular wheel-tracks of the same kind in a condition, as it seemed to me, practically unchanged. I had specially noticed them seven years earlier and still remembered them, either because they led in a direction difficult to account for, e. g. across the line of the wall, or for some similar reason. I have thus been led to the belief that the relative frequency of these wheel-tracks met with on utterly desolate ground, such as that south of the line T. VIII-T. XIV, has to be explained by their being made during a prolonged period, and that the fainter ones among them may date back far—a century or perhaps more.

Old wheel tracks on gravel soil.

But in the course of the explorations of April-May, 1907, I had already noted with surprise that the footprints which we ourselves and our ponies had left on the ground when we first traced the wall on our journey to Tun-huang along the section lying close to the caravan route, from T. III to T. XI, looked two months later absolutely as fresh as if we had just passed by. Yet I was well aware from sad experience of the force of the winds which in the interval had blown almost daily over the great desert basin. Hence I felt less surprise when, on my return in March, 1914, and on following once again the line of the Limes from T. IV. a right through to T. XIV, I could quite distinctly recognize my own footprints of seven years before in many places where the soil was of the right sort. I could, though less frequently, even make out those of my little fox terrier, 'Dash II', the ever faithful companion of that journey. Exactly corresponding observations are well known to geologists and have often been reported from desert areas, widely distant in geographical distribution, but presenting similar surface conditions. Thus Prof. J. Walther quotes the case of a wheel-track in the Californian desert which after 11 years was found to look perfectly fresh, and that of camel footprints in the Sahara, dating from 1877 and still quite clearly recognizable in 1892.² I am unable to ascertain at present whether any ancient tracks, resembling in character the patrol path discovered along the Tun-huang Limes, have been traced on desert ground of regions like Egypt, Arabia Petraea, or Tunis where climatic conditions, on the one hand, might permit of their survival, and archaeological evidence, on the other, as clear as that of our Limes might be forthcoming to settle their date.

Own footprints traced after seven years.

In Chapter XIV I have already given a full description of the watch-tower T. VII, which completely overlooked the depression there crossed by the line of wall coming from T. III. A subsequent close search of the ground near this tower yielded only scanty fragments of ancient

Watch-tower T. VII.

² Cf. J. Walther, *Das Gesetz der Wüstenbildung*, 1900, p. 54, with a reference to Foureau, *Au Sahara*, reviewed in *Petermann's Geogr. Mittheilungen*, 1897, xliii, Beilage, p. 175.