

nearest approach to such a venture was that of the Babylonian prince Nebuchadnezzar in 605 B. C. He was in southern Palestine about to pursue the forces of Pharaoh Necho into Egypt, when he learned that his father, Nabopolassar, had died. Fearing a pretender might arise, to save time he hurried across the Arabian Desert to Babylon with a small band of followers; but he sent his army by the circuitous route around by the Naharina, the western bend of the Euphrates, and northern Mesopotamia by which he had come.²⁴ Countless conquerors before him had traveled this road, whether they marched east or west.

This was the route of Alexander the Great. Moving north after his conquest of Egypt and Phoenicia, he crossed the Euphrates at Thapsacus in August 331 B. C. for the invasion of Mesopotamia. He did not take the short way down the river to Babylon, but struck north up the Balikh valley and then east along the piedmont of the Taurus foothills to the Tigris River, because this route offered the easiest line of march, provisions for his men, and fodder for his animals; so Arrian, his chronicler, tells us.²⁵ In Mesopotamia a food supply big enough for a large army and its transport in late summer pointed to irrigated fields, a sedentary population, and considerable towns. These were conditions which attracted ancient armies and traders to this route. They attracted also the German promoters and engineers who projected the modern Bagdad Railroad.

ANTIQUITY OF THIS ROUTE

As far back as we can penetrate into the remote past, we find that the main line of communication from the Persian Gulf to the Mediterranean followed a land road east of the Tigris along the base of the Persian highlands north to Assur or Nineveh near modern Mosul, ran thence westward along the piedmont of northern Mesopotamia to the great western bend of the Euphrates, which it crossed by ford or ferry according to the place and time of the year. Thence it continued west past Chalybon (Aleppo) to the Mediterranean by the Amanus passes or by more devious and difficult tracks farther south. From Aleppo eastward to Mosul this is the route of the Bagdad Railroad, which between Mosul and Bagdad follows the level west bank of the Tigris to avoid engineering difficulties and reduce operating expenses. Many of the stations on or near the railroad, like Nisibis, Ras-el-Ain (Resaina), Harran, Jerablus (Carchemish), and Aleppo meet us at the beginning of history. They have seen the encampment of royal Babylonian armies 2000 or 3000 B. C., and they have watched the sheik Abraham pitch his tents by their wayside waters, as he drifted westward with his clan towards the land of Canaan.²⁶

²⁴ G. C. C. Maspero: *The Passing of the Empires*, New York, 1900, p. 518; George Rawlinson: *The Five Great Monarchies of the Ancient Eastern World*, New York, 1870, Vol. 3, p. 49, footnote 16.

²⁵ Arrian: *Anabasis of Alexander*, Bk. 3, Ch. 7.

²⁶ Genesis, xi, 31: xii, 4-5.

CLIMATIC AND GEOGRAPHIC REASONS FOR THIS ROUTE

This ancient route between the Syrian Saddle and the Tigris highway finds its explanation in the climatic and geographic conditions of northern Mesopotamia. These have determined the distribution of settlements and the main lines of travel in this semi-arid land. Mesopotamia is a region of meager winter rains and long summer droughts. The dry season falls in the hottest part of the year, when great heat prevails over the plains and evaporation is intense. The precipitation from May to November is practically nil, and even in the cold season it is scant. The plains from the Persian Gulf north to the 36th parallel get less than 8 inches, or 200 millimeters, of rain²⁷ (Fig. 2). From this line northward precipitation in-

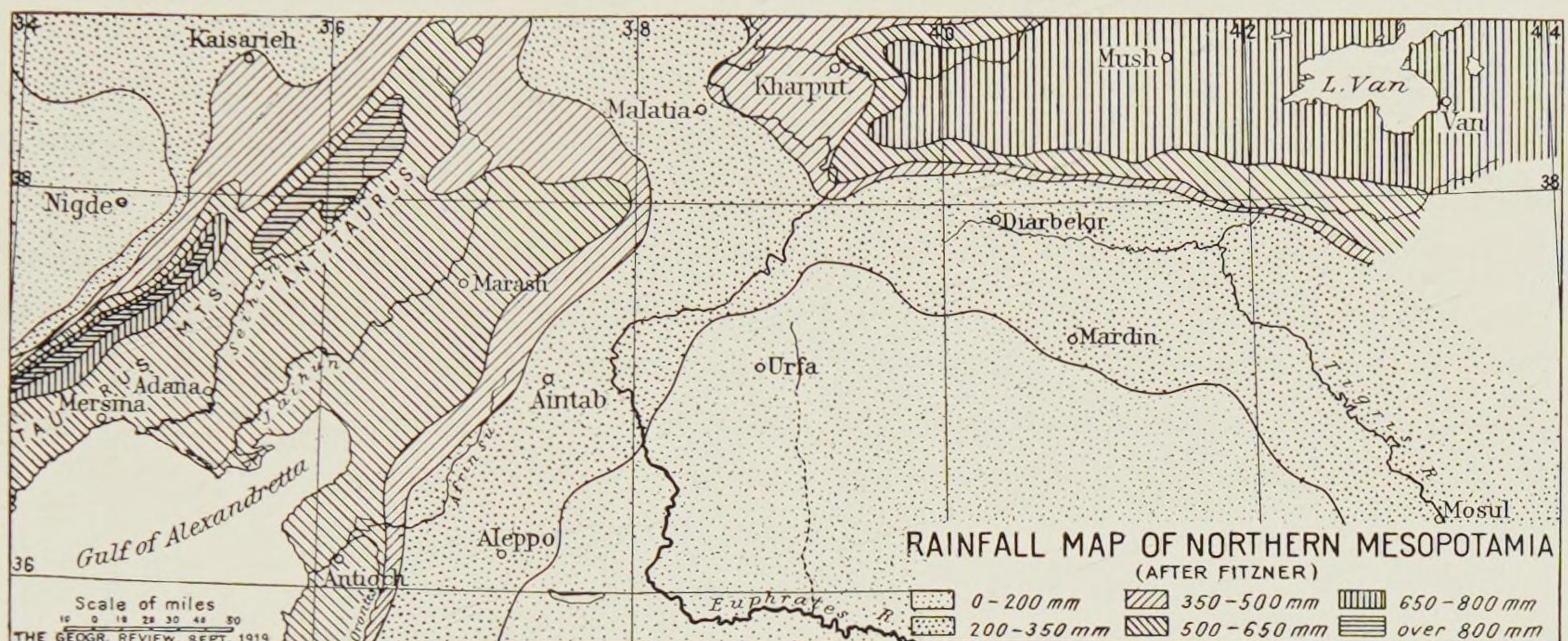


FIG. 2—(Based on source cited in footnote 27).

creases owing both to the more northern location and the higher elevation of upper Mesopotamia. The increments, however, are very small. The line of ten inches (250 millimeters) annual rainfall describes an arc subtended by the 36th parallel, with one extremity 30 miles southeast of Mosul and the other at Aleppo, while the curve runs up the Tigris River and along the crest of a series of highlands which form an outlier of the Taurus system and wall in the plains of Mesopotamia on the north.

THE URBAN BELT

These highlands consist of the Tur Abdin (ancient Mt. Masius), a long narrow plateau of 3,300 to 4,000 feet elevation with a steep escarpment to the south, and the Karaja Mountains (ancient Mt. Izala), an old volcanic massif which maintains a general altitude of about 4,100 feet, but rises to 6,068 feet in its culminating peak, only to sink westward towards the Euphrates bend in an undulating upland 2,600 feet above sea level.²⁸ These massive foothills of the Taurus are high enough to wring some mois-

²⁷ Rudolf Fitzner: Niederschläge in Klein-Asien, *Petermanns Mitt. Ergänzungsheft No. 140*, 1896, p. 90, rainfall chart.

²⁸ Hogarth, *op. cit.*, pp. 62, 91, and 97.

ture from the reluctant clouds. In winter they accumulate snow enough on their upper slopes to form a considerable reservoir of moisture; and in the spring they drop a fringe of slender torrents down to the plain. Their irrigating streams through the ages have reclaimed the northern border of the Mesopotamian steppe from pastoral nomadism and stretched a piedmont belt of towns, surrounded by well-watered gardens, orchards, vineyards, and fields, to link the settlements on the Tigris with the western bend of the Euphrates and the Syrian Saddle.

The breadth of this urban belt, the density and prosperity of its population, has generally depended upon the strength and sanity of the ruling governments, whether in Babylon, Nineveh, Antioch, Rome, or Bagdad. Its northern edge in ancient times, as in modern, was pushed well up into the highlands to an altitude of about 2,000 feet at Urhai or Edessa (modern Urfa), at the ancient Babylonian Tela near the later Roman Constantina and modern Veranshehr, as later in the first century B. C. at the Armenian capital of Tigranocerta, whose mound of ruins lies beside the modern Koihissar; and at Marde (modern Mardin) it climbed the steep slope of Mt. Masius to 3,050 feet. These upper towns enjoyed comparative immunity from nomad raids from the steppes, while they commanded numerous springs and an assured water supply. However, in Mardin in the twelfth century every house had its cistern for storing rain water;²⁹ ancient cisterns everywhere indicate the economy practiced.

The downstream settlements of this urban belt, like Harran or Carrhae, Resaina or Ras-el-Ain, and Nisibis, lay only about 1,400 or 1,500 feet above sea level; though more precariously located as to water supply and nomad attack, they nevertheless occupied a better position for trade. They were stations on the great piedmont route between the Tigris and the Euphrates, which was a type of all such roads in semi-arid lands. It marked the nice adjustment between the farthest encroachment of the desert uphill in the dry season, and the farthest assured reach desertward of the irrigation streams from the mountains behind. North of this line, where the slope from the marginal highlands was steeper, the deeper valleys cut by the swift drainage streams and the more rugged character of the country presented obstacles to transportation.

SEASONAL DEVIATIONS FROM THE ESTABLISHED ROUTE

It must not be supposed, however, that the ancient route never deviated from this line; that would be contrary to the nature of primitive roads in grasslands. In the late summer, when the interfluvial spaces were parched and the water holes dry, especially when a succession of almost rainless years had expanded the domain of the desert, then army or caravan would take a parallel path farther north, near the upper edge of the urban

²⁹ Guy Le Strange: *The Lands of the Eastern Caliphate*, Cambridge, 1905, p. 97.

piedmont belt. It would cross the Euphrates at Biredjik, one of the most important crossing places of the river from time immemorial, site of the Greek Zeugma or bridge,³⁰ and turn thence east to the ancient Greek Edessa and yet more ancient Aramaic Urhai. Then, passing numerous villages, now heaps of ruins except for their ancient cisterns which still serve travelers till late summer, it would go eastward through the upper hill towns till it reached ancient Marde. This upper track, maintaining a general level of 2,000 feet, was nearer the springs that fed the streams and offered better pasturage for the pack animal. From Marde, however, it dropped down to Nisibis, which lay on the Gargar, the last perennial stream. Few of these piedmont rivers outlive the summer drought and the tax of irrigation. The Gargar, which still waters the gardens and fields of Nisibis, is sometimes 20 feet wide in August and too deep to be crossed except at fords.³¹ Nisibis was therefore always a station on the piedmont route.

In the dry season the track continued eastward, hugging the foot of the Tur Abdin escarpment with its fountains and wells all the way to the Tigris gorge at ancient Bezabde (modern Jezira-ibn-Oman). This was the road taken by Alexander the Great in the summer of 331 B. C. An eclipse of the sun fixes the date when he crossed the Tigris as September 20, the climax of the dry season.³² However, after the winter rains had carpeted all northern Mesopotamia with grasses and flowers, the main route turned southeastward, about 20 miles east of Nisibis, and struck out straight towards Nineveh across an arid stretch of 30 miles, until it met the wadis draining northeastward from the Singar Mountains to the Tigris. This is the path of the Bagdad Railroad from Nisibis to Mosul. So stable is the geography of communications in these semi-arid lands. Yet another variant, feasible in spring for armies, turned west from Nineveh and followed the southern base of the Singar Mountains, whose barrier was high enough to make the passing winds pay a toll of water; then bent north through a gap in the range to Nisibis,³³ crossing the sheaf of wadis which united to form the Saocaras River (modern Gargar). This route was less favorable for caravans than for armies because it was exposed to nomad raids.

HISTORICAL EMERGENCE OF THE PIEDMONT ROUTE

Historical evidence shows that the Mesopotamian piedmont was the chief link between ancient Babylonia and the West. This is indicated by the persistent trend of Babylonian and Assyrian expansion westward along this piedmont, especially after 1500 B. C., when we begin to get reliable accounts of the wars for the control of northern Mesopotamia. The need

³⁰ Strabo, Bk. 16, Ch. 1, § 23.

³¹ Max von Oppenheim: *Vom Mittelmeer zum Persischen Golf*, Berlin, 1900, Vol. 2, pp. 26, 31, and 256.

³² Arrian, *op. cit.*, Bk. 3, Ch. 7.

³³ G. C. C. Maspero: *The Struggle of the Nations*, New York, 1897, p. 643.