Henry Finnis Blosse (H.F.B.) Lynch (1862-1916) summited Mount Ararat in September 1893 as well as visited Ani. Lynch's detailed mind convinced himself to take several years to produce, edit and validate his classic two-volume set of books on his travels entitled Armenia: Travels and Studies. His family ran Lynch Brothers, a firm that traded with, and ran shipping lines in, Persia and Mesopotamia. He had already travelled widely in these regions before their geographical closeness to the Caucasus, together with the persecution of the Doukhobors, attracted him to the Akhalkalak district of Tiflis province, Russia in September 1893. His observations were published in his article "Queen Lukeria of Gorelovka" in Harper's New Monthly Magazine, Vol. 93, Issue 553 (June, 1896).

Chapter 5

1893 British Author, Geographer, and Parliamentarian H.F.B. Lynch

Editor's Note: The most interesting selections of Lynch's classic two-volume set Armenia: Travels and Studies have been placed here.

Nachalnik rose from his chair and summoned his servants about him. He cursed the mongrel race of horsekeepers, Persians or Tartars, the blood of brigands all. Who could tell in what holes these thieves were hiding? We should go by the post, and post horses *must* be found. Arrived at Aralykh, the Cossacks would mount us on their own horses; and we should no doubt be able to impress some animals in the neighbourhood for the transport of our tents. His emissaries flew in all directions, with the result that, within the respectable space of three hours, a post car, drawn by a pair of horses, was standing at our door.

The first is this valley of the Araxes, with its more narrow continuation westwards through the district between Kagyzman and Khorasan; the second is the plain of Pasin; the third the plain of Erzerum. Yet while the plains of Pasin and of Erzerum are situated respectively at an altitude of 5500 and 5750 feet, the valley of the Araxes in the neighbourhood of Erivan is only 2800 feet above the sea. Both on the north and south of this considerable depression, even the plainer levels of the tableland attain the imposing altitude of 7000 feet, while its surface has been uplifted by volcanic action into long and irregular convexities of mountain and hill and hummock.

When we come to investigate the underlying principle, we find that, along a line of upheaval which has been uniform in a direction from north-west to south-east, two mountains have been reared by volcanic action, their axes following the line of upheaval and their summits 7 miles apart. The springless *troika* bumped heavily on the projecting slabs of massive boulders, embedded in the fairway. The road which leads through this stony region is little better than a natural track.

At Kamarlu you leave the region of gardens, and make direct for the margin of the river, which flows between high banks through a melancholy district of wasteland and cracking soil. In his yellow stream, of which the width at this point can scarcely exceed eighty yards, it is difficult to recognise with becoming emotion the haughty flood of the Araxes; yet the river is still crossed by fords or ferries, and still retains, I believe, the ancient distinction that it does not brook a bridge.

A young Russian officer in white linen tunic received us at the door. As we passed within the house, the burly figure of Rudolph was seen emerging from the shades. Our host had lodged the whole party in his quarters, and would not hear of our living in our tents. At Aralykh there are stationed a squadron of Cossacks and a detachment of regular cavalry. The regulars are employed in protecting the customs, and the Cossacks in hunting the Kurds. It was interesting to notice the contrast—in demeanour as well as in habits—between the polished young lieutenant of regulars and the kind but boisterous colonel of Cossacks. How small are the differences between opposite nationalities when compared with such essential divisions as these!

Chapter XII – Ascent of Ararat

A narrow strip of plantation runs at the back of Aralykh, on the south, sustained by ducts from the Kara Su or Blackwater, a stream which leads a portion of the waters of the Araxes into the cotton fields and marshes which border the right bank. Within this fringe of slim poplars, and just on its southern verge, there is a little mound and an open summer-house—as pleasant a place as it is possible to imagine, but which, perhaps, only differs from other summerhouses in the remarkable situation which it occupies and in the wonderful view which it commands. It is placed on the extreme foot of Ararat, exactly on the line where all inclination ceases and the floor of the plain begins. It immediately faces the summit of the larger mountain, bearing about southwest (Frontispiece).

Yet, although Aralykh lies at the flank of Ararat, confronting the side, which mounts most directly from the plain to the roof of snow, the distance from a perpendicular drawn through the summit is over 16 miles. First, there is a belt of loose sand, about 2 miles in depth, beginning on the margin of marsh and irrigation, and seen from this garden, which directly adjoins it, like the sea-bed from a grove on the shore. On the ground of yellow, thus presented, rests a light tissue of green, consisting of the sparse bushes of the ever-fresh camelthorn, a plant which strikes down into beds of moisture, deep-seated beneath the surface of the soil. Although it is possible, crossing this sand-zone, to detect the growing slope, yet this feature is scarcely perceptible from Aralykh, whence its smooth, unbroken surface and cool relief of green suggest the appearance of an embroidered carpet, spread at the threshold of an Eastern temple for the services of prayer. Beyond this band or belt of sandy ground, composed no doubt of a pulverized detritus, which the piety of Parrot was quick to recognise as a leaving of the Flood, the broad and massive base of Ararat sensibly gathers and inclines, seared by the sinuous furrows of dry watercourses, and stretching, uninterrupted by step or obstacle, hill or terrace or bank, to the veil of thin mist which hangs at this hour along the higher seams.

It was the morning of the 17th of September, a period of the year when the heats have moderated; when the early air, even in the plain of the Araxes, has acquired a suggestion of crispness, and the sun still overpowers the first symptoms of winter chills.¹ All the Cossacks at the time quartered in Aralykh—the greater number were absent on the slopes of the mountain, serving the usual patrols—had been drawn up in marching order, awaiting the arrival of their Colonel, who had contrived to keep the secret by expressing his willingness to accompany us a few versts [Russian measure of linear distance equivalent to about two thirds of a mile] of the way. My cousin and I were riding with the Colonel, and the purpose of these elaborate arrangements was explained to us with a sly smile; the troop with their Colonel were to escort us on our first day's journey, and to bivouac at Sardar Bulakh. The order was given to march in half column. It was perhaps the first time that an English officer had ridden at the head of these famous troops. We crossed the last runnel on the southern edge of the plantation and entered the silent waste.

For a while we slowly rode through the camelthorn, the deep sand sinking beneath our horses' feet. It was nearly one o'clock, and the expanse around us streamed in the full glare of noon. A spell seems to rest upon the landscape of the mountain, sealing all the springs of life. Only, among the evergreen shrubs about us, a scattered group of camels cropped the spinous foliage, little lizards darted, a flock of sand-grouse took wing. Our course lay slantwise across the base of Ararat, towards the hill of Takjaltu, a table-topped mass, overgrown with yellow herbage, which rises in advance of the saddle between the mountains, and lies just below you as you overlook the landscape from the valley of Sardar Bulakh. Gullies of chalk and ground strewn with stones succeed the even surface of the belt of sand, and in turn give way to the covering of burnt grass which clothes the deep slope of the great sweeping base, and encircles the fabric with a continuous stretch of ochre, extending up the higher seams. Mile after mile we rode at easy paces over the parched turf and the cracking soil. When we had accomplished a space of about 10 miles, and attained a height of nearly 6000 feet, the land broke about us into miniature ravines, deep gullies, strewn with stones and boulders, searing the slope about the line of the limit where the base may be said to determine and the higher seams begin.

I noticed that by far the greater number among the [Cossacks]—if, indeed, one might not say all—were men in the opening years of manhood—lithe, well-knit figures, and fair complexions, set round with fair hair. At a nearer view the

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feature which most impressed me was the smallness of their eyes. They wear the long, skirted coat of Circassia, a thin and worn khaki; the faded pink on the cloth of their shoulder-straps relieves the dull drab. Their little caps of Circassian pattern fit closely round their heads. Their horses are clumsy, long-backed creatures, wanting in all the characteristics of quality; and, as each man maintains his own animal, few among them are shod. Yet I am assured that the breed is workmanlike and enduring, and I have known it to yield most satisfactory progeny when crossed with English racing blood. As we rounded the heap of grass-grown soil which is known as Takjaltu, we were joined by a second detachment of Cossacks, coming from Akhury.

Our men were acquainted with every cranny; we had halted near the site of their summer encampment, from which they had only recently descended to their winter quarters in the plain. As we dismounted we were met by a graceful figure, clad in a Circassian coat of brown material let in across the breast with pink silk—a young man of most engaging appearance and manners, presented to us as the chief of the Kurds on Ararat who own allegiance to the Tsar. In the high refinement of his features, in the bronzed complexion and soft brown eyes, the Kurd made a striking contrast to the Cossacks—a contrast by no means to the advantage of the Cis-Caucasian race. The young chief is also worthy to be remembered in respect of the remarkable name which he bears. His Kurdish title of Shamden Agha has been developed and embroidered into the sonorous appellation of Hasan Bey Shamshadinoff, under which he is officially known.

It is here that the Kurds of the surrounding region gather, as the shades of night approach, to water their flocks at the lonely pool, which is known as the sirdar's well. On the summit of the lesser Ararat there is a little lake, formed of melted snows; the water permeates the mountain, and feeds the sirdar's pool. Close by, at the foot of the lesser mountain, is the famous covert of birch—low bushes, the only stretch of wood upon the fabric, which is entirely devoid of trees.

At its feet, where its train sweeps the floor of the river valley in long and regular folds—far away in the east, towards the mists of the Caspian—the sandy ground breaks into a troubled surface, like angry waves set solid under a spell, and from range to range stretch a chain of low white hummocks, like islands across a sea. Just there, in the distance, beneath the Little Ararat, you see a patch of shining white, so vivid that it presents the appearance of a glacier, set in the burnt waste. It is probably caused by some chemical efflorescence, resting on the dry bed of a lake. All the landscape reveals the frenzy of volcanic forces, fixed forever in an imperishable mould; the imagination plays with the forms of distant castles and fortresses of sand. The wreath of cloud which veils the summit till the last breath of warm air dies has floated away in the calm heaven before the western lights have paled.

The long-backed Cossack horses had been groomed and watered and picketed in line; the men were sitting smoking in little groups or were strolling about the camp in pairs. A few Kurds, who had come down with milk and provisions, stood listlessly looking on, the beak nose projecting from the bony cheeks, the brown chest opening from the many-coloured tatters draped about the shoulders and waist.

The space of level ground between the two mountains cannot much exceed three-quarters of a mile. On the east the graceful seams of Little Ararat rise immediately from the slope upon our right, gathering just beyond the covert of low birchwood, and converging in the from of a pyramid towards a summit, which has been broken across the point. The platform of this valley is a base for Little Ararat—the rib on the flank of the greater mountain from which the smaller proceeds.

Whether its want of connection with the roof of Ararat, of the inherent characteristics of its uppermost end, be sufficient evidence to justify the supposition of Abich that this ridge at its head marks a separate eruptive centre on the flank of Ararat, I am not competent adequately to discuss. I can only observe that it is not difficult to find another explanation. It is possible that the ridge where it narrows to the summit has been fractured and swept away. This peak, or sharp end of the causeway, to whatever causes its origin may be ascribed, is a distinguishing feature on the slope of Ararat, seen far and wide like a tooth or hump or shoulder on this the south-eastern side.²

Although the most direct way to the summit region leads immediately across the zone of boulders from the camp by the sirdar's pool, yet it is not that which most travelers have followed, or which the natives of the district recommend. This line of approach, which I followed for some distance a few days after our ascent, is open to the objection that it is no doubt more difficult to scale the slope of snow upon this side. The tract of uncovered rocks, which breaks the snowfields, offering ladders to the roof of the dome, is situated further to the southeast of the mountain, above the neck of the valley of the pool. Whether it would not be more easy to reach these ladders by skirting slantwise from the higher slopes, is a question which is not in itself unreasonable, and which only actual experience will decide. It was in this manner, I believe, that the English traveler, my friend the Rt. Hon. James Bryce, made an ascent which, as a feat, is, I think, the most remarkable of any of the recorded climbs. Starting from the pool at one o'clock in the morning, he reached the summit, alone, at about two in the afternoon, accomplishing within a space of about six hours the last 5000 feet, and returning to the point from which he started before sunrise on the following day. We ourselves were advised to follow up the valley, keeping the causeways upon our right, and only then, when we should have reached a point about southeast of the summit, to strike across the belt of rock.

At twenty minutes before two on the 18th of September our little party left camp in marching order, all in the pride of health and spirits, and eager for the attack. Thin wreaths of cloud wrapped the snows of the summit—the jealous spell which baffles the bold lover even when he already grasps his prize. We had taken leave of the Cossack officers and their band of light-hearted men. Our friends were returning to Akhury [Ahora] and Aralykh, the one body to hunt the Kurds of the frontier, the other to languish in dull inactivity until their turn should come round again. Four Cossacks were deputed to remain and guard our camp; we ourselves had decided to dispense with any escort and to trust to our Kurdish allies. Of these, ten sturdy fellows accompanied us as porters to carry our effects, their rifles slung over their many-coloured tatters beside the burden allotted to each (Fig. 35). With my cousin and myself were the young Swiss, Rudolph Taugwalder, a worthy example of his race and profession—the large limbs, the rosy cheeks, the open mien without guile—and young Ernest Wesson, fresh from the Polytechnic in London, burning to distinguish himself. My Armenian dragoman followed as best he was able until the camp at the snow was reached; his plump little figure was not well adapted to toil over the giant rocks. Of our number was also an Armenian from Akhury, who had tendered his services as guide; he was able to indicate a place for our night's encampment, but he did not venture upon the slope of snow.



A little stream trickles down the valley, but sinks exhausted at this season before reaching the sirdar's well. In the early summer it is of the volume of a torrent, which winds past the encampment, like a serpent of silver, uttering a dull, rumbling sound.³ It is fed by the water from the snow-fields, and there is said to be a spring which contributes to support it at a height of nearly 11,000 feet.⁴ The spurs on our right descend from the shoulder of Great Ararat, from the causeway of which it forms the head, and are seen to diverge into two systems as they enter the narrow pass. The one group pushes forward to the Little Ararat and is lost in confused detail; the other and, perhaps, the larger system bends boldly along the side of the valley, sweeping outwards towards the base. At three o'clock we reached a large pool of clouded water, collected on a table surface of burnt grass; close by is an extensive bed of nettles, and a circle of loose

⁴ Markoff, Ascension du Grand Ararat, in Bulletin de la Soc. Roy. Belge de Géographie, Brussels, 1888, p. 579.

stones. This spot is, no doubt, the site of a Kurdish encampment, and appeared to have been only recently abandoned by the shepherds and their flocks. The further we progressed, the more the prospect opened over the slopes of Ararat; we were approaching the level of the tops of the ridges, which skirt the valley side. Passing, as we now were, between the two Ararats, we again remarked that the greater seemed no higher than the lesser, so completely is the eye deceived. In the hollows of the gully there were small pools of water, but the stream itself was dry.

By half-past three we had left the gentle water-course, and were winding inwards, up the slope of Great Ararat, to cross the black and barren region, the girdle of sharp crags and slippery boulders which is drawn round the upper seams of the mountain, like a succession of *chevaux de frise*. We thought it must have been on some other side of Ararat that the animals descended from the Ark. For a space of more than three hours we laboured on over a chaos of rocks, through a labyrinth of troughs and ridges, picking a path and as often retracing it, or scrambling up the polished sides of the larger blocks which arrest the most crafty approach. The Kurds, although sorely taxed by their burdens, were at an advantage compared to ourselves; they could slip, like cats, from ledge to ledge in their laced slippers of hide. In one place we passed a gigantic heap of boulders, towering several hundred feet above our heads. The rock is throughout of the same character and colour—an andesitic lava of a dark slaty hue. A little later we threaded up a ravine or gully, and, after keeping for awhile to the bottom of the depression, climbed slowly along the back of the ridge. I noticed that the grain or direction of the formation lay towards east-southeast...

It was seven o'clock, and we had no sooner halted than the biting frost numbed our limbs.⁵ The temperature in the tent sank below freezing before night was done. The sheep skin coats which we had brought from Aralykh protected us from chill, but the hardy Kurds slept in their seamy tatters upon the naked rocks around. One among them sought protection as the cold became intenser, and we wrapped him in a warm cape. It was the first time I had passed the night at so great an elevation—12,194 feet above the sea—and it is possible that the unwonted rarity of the atmosphere contributed to keep us awake. But, whether it may have arisen from the conditions which surrounded us, or from a nervous state of physical excitement inspired by our enterprise, not one among us, excepting the dragoman, succeeded in courting sleep.

The regular seams which mount to the summit stretch continuous to the crown of snow, and are inclined at an angle which diverges very little from an average of 30°. The gradients from which these higher seams gather—the slopes about our camp—cannot exceed half that inclination, or an angle of 15°. Our plan was to cross the stony region about us, slanting a little east, and to mount by the rocks on the western margin of the snow-field, adhering as closely as might be possible to the side of the snow. It was in the execution of this plan—so simple in its conception—that the trained instinct of the Swiss availed. Of those who have attempted the ascent of Ararat—and their number is not large—so many have failed to reach the summit that, upon a mountain which makes few, if any, demands upon the resources of the climber's craft, their discomfiture must be attributed to other reasons: to the peculiar nature of the ground traversed, no less than to the inordinate duration of the effort; to the wearisome recurrence of the same kind of obstacles, and to the rarity of the air. Now the disposition of the rocks upon the surface of the depression is by no means the same as that which we have studied in connection with the seams which lie below.

At twenty minutes to seven, when the summit of Little Ararat was about on a level with the eye, we paused for a while and turned towards the prospect, now opening to a wider range. The day was clear, and promised warmth; above us the snowy dome of Ararat shone in a cloudless sky. The landscape on either side of the beautiful pyramid lay outspread at our feet; from north-east, the hidden shores of Lake Sevan, to where the invisible seas of Van and Urmi diffused a soft veil of opaline vapour over the long succession of lonely ranges in the south-east and south. The wild borderland of Persia and Turkey here for the first time expands to view. And now, without any sign or warning, the mysterious spell which holds the mountain begins to throw a web about us, craftily, from below. The spirits of the air come sailing through the azure with shining gossamer wings, while the heavier vapours gather around us from dense banks serried upon the slope beneath us, a thousand feet lower down.

The rocks still climb the increasing gradient, but the snow is closing in. At eleven we halt to copy an inscription, which has been neatly written in Russian characters on the face of a boulder stone. It records that on the third day the

eighth month of 1893 the expedition led by the Russian traveler Postukhoff passed the night in this place. At the foot of the stone lie several objects: a bottle filled with fluid, an empty tin of biscuits, a tin containing specimens of rock.

At half-past eleven I take the angle of the snow slope, at this point 35°. About this time the Swiss thinks it prudent to link us all together with his rope. The surface of the rocks is still uncovered, but their bases are embedded in deep snow. It is now, after six hours' arduous climbing, that the strain of the effort tells. The lungs are working at the extreme of their capacity, and the pressure upon the heart is severe. At noon I call a halt, and release young Wesson from his place in the file of four. His pluck is still strong, but his look and gait alarm me, and I persuade him to desist. We leave him to rest in a sheltered place, and there await our return. From this time on we all three suffer, even the Swiss himself. My cousin is affected with mountain sickness; as for me, I find it almost impossible to breathe and climb at the same time. We make a few steps upwards and then pause breathless, and gasp again and again. The white slope vanishing above us must end in the crown of the dome; and the boulders strewn more sparsely before us promise a fairer way. But the further we go, the goal seems little closer; and the shallow snow, resting on a crumbling rubble, makes us lose one step in every three. A strong smell of sulphur permeates the atmosphere; it proceeds from the sliding surface upon which we are treading, a detritus of pale sulphurous stones.

At 1:25 we see a plate of white metal, affixed to a cranny in the rocks. It bears an inscription in Russian character, which dates from 1888. I neglect to copy out the unfamiliar letters; but there can be little doubt that they record the successful ascent of Dr. Markoff, an ascent which cost him dear.

A few minutes later, at half-past one, the slope at last eases, the ground flattens, the struggling rocks sink beneath the surface of a continuous field of snow. At last we stand upon the summit of Ararat—but the sun no longer pierces the white vapour; a fierce gale drives across the forbidden region, and whips the eye straining to distinguish the limits of snow and cloud. Vague forms hurry past on the wings of the whirlwind; in place of the landscape of the land of promise we search dense banks of fog.

Disappointed perhaps, but relieved of the gradient, and elated with the success of our climb, we run in the teeth of the wind across the platform, our feet scarcely sinking in the storm-swept crust of the surface, the gently undulating roof of the dome. Along the edge of a spacious snow-field which dips towards the centre, and is longest from northwest to southeast, on the vaulted rim of the saucer which the surface resembles, four separate elevations may conveniently be distinguished as the highest points in the irregular oval figure which the whole platform appears to present. The highest among these rounded elevations bears northwest from the spot where we first touch the summit or emerge upon the roof. That spot itself marks another of these inequalities; the remaining two are situated respectively in this manner-the one about midway between the two already mentioned, but nearer to the first and on the north side; the other about south of the north-western elevation, and this seems the lowest of all. The difference in height between the north-western elevation and that upon the southeast is about 200 feet; and the length of the figure between these points—we paced only a certain portion of the distance—is about 500 yards. The width of the platform, so far as we could gauge it, may be some 300 yards. A single object testifies to the efforts of our forerunners and to the insatiable enterprise of man-a stout stake embedded upon the northwestern elevation in a little pyramid of stones. It is here that we take our observations, and make our longest halt.⁶ The distance down and up from where we stand to that summit may be about 400 yards; but neither the Swiss nor ourselves consider it higher, and we are prevented from still further exploring the summit region by the increasing violence of the gale and by the gathering gloom of cloud. The sides and floor of the saddle between the two summits are completely covered with snow, and we see no trace of the lateral fissure which Abich, no doubt under different circumstances, was able to observe. We remain forty minutes upon the summit; but the dense veil never lifts from the platform, not does the blast cease to pierce us through. No sooner does an opening in the driving vapours reveal a vista of the world below than fresh levies fly to the unguarded interval, and the wild onset resumes.

⁶ The temperature of the air a few feet below the summit out of the gale was 20° F. The height of the north-western elevation of the south-eastern summit of Ararat is given by my Hicks mountain aneroid as 17,493 feet. The reading is no doubt too high by several hundred feet. The Carey aneroid gives a still higher figure, and the Boylean-Mariotti mercurial barometer entirely refused to work.

Chapter XIII - The Heart of Ararat

The Swiss and myself determined to try a glissade down the snow slope; my cousin preferred to adhere to the rocks. I was aware of the danger of the glissade down Ararat, and we therefore planned our course with care. We broke the descent at several points, made errors on the side of caution, and glided safely into one of the inlets about the base of the cone. It was still some distance to the encampment; we proceeded with the utmost leisure across the boulder-strewn waste. At last we beheld the lake of snow, and our tiny tent beside it, and the gaunt figures of the Kurds. These also perceived us, and sent us a cry of greeting, which vibrated in the still air. Wesson and the dragoman were there to meet us; my cousin arrived almost at the same time. Our climb had been accomplished without a single mishap, and all except dragoman, who pleaded that he had been half frozen in camp, were pleased with the day's work. It was twenty minutes past six o'clock; yet I thought it best to strike our tent and seek a less exposed and less elevated spot. After a toilsome walk of about half an hour we found some grass in a little valley, and there composed ourselves for the night.

The journey to Erivan, by way of Tiflis, can be performed in luxury; from Erivan you can drive in a Victoria to the foot of Ararat; on the mountain you have need of nothing but a tent and a cook. The Kurds are well-behaved, and will provide you with milk and mutton, of which it is a treat to taste. The old lawless times are passing into legend, thanks to the vigorous rule of the Tsars. The Russian officials abound in real kindness of disposition; and, if you can only succeed in patching a peace with the *system*, you feel that they really wish you well. We returned to Aralykh on the 22nd of September after an absence of nearly six days.

The cantonment of Aralykh faces the jaws of the great chasm which extends from the snowy roof to the base of Ararat, and lays the heart of the mountain bare (Fig.. We were anxious to penetrate within these dark recesses, and after a day's rest, carried our project into effect. It is a melancholy reflection that nothing is lasting-that the strength of the earth withers and the strength of the human body, that faith dies and the closest friendships dissolve. In the world of sense Time is all-powerful, and nothing escapes destruction at his hands.⁷ This painful lesson is written with terrible emphasis on the fabric of Ararat, where it fronts the historic river and the historic plains. Another earthquake, and the massive roof may tumble headlong into the abyss which now yawns beneath its cornice of snow. I have already observed that Herrmann Abich was able to remark a lateral fissure between the two highest elevations in the surface of the crown of the dome. He suggests that this fissure may have been caused by the convulsion of 1840, to which the present configuration of the chasm is due.⁸ It would therefore appear that Time has already taken a decisive step towards the overthrow of the uppermost portion of the cone. The chasm itself and the subsidence of the flank of the mountain date from an epoch beyond the range of history. Tournefort, who visited Ararat in 1701, presents us with such a vivid picture of the rent side of the giant, which one cannot doubt that the essential features of the chasm existed in his day.⁹ The little monastery of St. Jacob, which, prior to the catastrophe of 1840, stood within the recesses of the gulf, probably occupied the same site when it was first erected in the early Christian times. The reader may not be acquainted with the story of the catastrophe, and may like to learn or to recall it in this place.

Several travelers have presented us with a description of the locality as it existed before those events.¹⁰ Some 10 miles from the banks of the Kara Su, on the base or pedestal of Ararat, at a height of some 5600 feet above the sea, or 2900 feet above the plain,¹¹ was situated the Armenian village of Akhury or Arghuri—the only village, we are informed by Dubois, which had hazarded a position on the side of the mountain,¹² and a place which boasted a remote antiquity.

⁹ Tournefort, *Voyage du Levant*, Paris, 1717, vol. ii. pp. 357 seq. See also Ritter, *Erdkunde*, vol. x. p. 507.

⁷ Sophocles, *Edipus at Colonus*, I. 610 seq.

⁸ Abich, *Besteigung des Ararat*, in Baer and Helmersen's *Beiträge zur Kenntniss des Russischen Reiches*, St. Petersburg, 1849, vol. xiii. p. 63. He supports this suggestion by the fact that neither Parrot nor Spasky Avtonomoff mentions the existence of such a fissure. But whether you may be able to see any trace of it or not must depend upon the state of the snow.

¹⁰ I refer my reader to the works of Tournefort (already cited), Parrot (*Reise zum Ararat*, Berlin, 1834), and Dubois de Montpéreux (*Voyage autour du Caucase*, Paris, 1839-45, vol. iii.).

¹¹ The measurements are my own. Dubois speaks of Akhury as being five leagues distant from the Kara Su.

¹² Parrot says the same thing, *op. cit.* p. 108.

According to Armenian tradition, it was there that Noah built the altar, and offered up the burnt sacrifice, after his departure from the Ark and safe descent of the mountain, with his family and the living creatures of every kind. It was at Akhury or Arghuri-a name which is said to signify in the Armenian language he has planted the vine¹³-that, according to the same tradition, the patriarch planted his vinevard and drank to excess of its wine. The inhabitants would point to an ancient willow of stunted growth, bent by the action of snow and ice; it stood in an isolated spot above the village, a rare object on a mountain which is almost devoid of trees. They believed that it drew its origin from a plank of the Ark which had taken root; and they would not suffer any damage to be done to the sacred object, or the least of its branches to be taken away. The population amounted to about 1000 souls;¹⁴ the houses numbered some two hundred, and were built of stone with the usual flat roofs. The settlement owed its prosperity, and even its existence, to a stream which then, as now, issued from the jaws of the chasm, fed by the melting ice and snow. It was placed at the open exit from the gorge, where the trough flattens out into the base. The church and the larger portion of the village were on the right bank of the stream; on the left, opposite the church, stood a square-shaped fortress, built of clay after the fashion of the country. A near eminence was crowned by the walls of a spacious palace, which served as a summer residence for the Persian sirdars of Erivan. It was indeed a delightful resort during the heats of summer. A cool draught descended from the snows of the summit region; and the little stream supported considerable vineyards and orchards, so that the traveller, on approaching Akhury, could take refuge from the glare of the plain in guite a little wood of apricot trees. The church-said to have been called Araxilvank (Arakelotz Vank?)-was reputed to have been built on the site of Noah's altar. It dated from the eighth or ninth century; and to such a height had the ground about it risen since its foundation, that the two side doors had become embedded in soil up to the crossbeams. Just beyond this pleasant oasis you entered the chasm, and, after proceeding for nearly two miles up its boulder-strewn hollow, you reached the little monastery of St. Jacob, which stood on the edge of a natural terrace a few hundred feet above the bottom of the gulf, immediately overlooking the right bank of the stream. The chasm had at this spot a depth of some 600 to 800 feet,¹⁵ and the elevation of the site of the monastery above sea-level was 6394 feet.¹⁶ Parrot, who established his headquarters in this lonely cloister, has handed down to us a charming illustration of the place, and a pleasant description of the chapel, with its walled enclosure and garden and orchard, the residence, at the time of his visit, of a single monk. Like the church of Akhury, it commemorated a religious event in the story of Ararat. A monk of the name of Jacob, afterwards bishop of Nisibis, reputed to have been a contemporary and relative of St. Gregory, was seized with the desire to convince the skeptics of the truth of the Biblical narrative, and to assure himself of the presence of the Ark on the summit of Ararat by the evidence of his own eyes. In the pursuit of this purpose he made several attempts to scale the mountain from the north-east side. On each occasion he fell asleep, exhausted by the effort; as often as he awoke, he would find that he had been miraculously transported to the point from which he had set out. At length God looked with compassion upon his fruitless labours, and sent an angel who appeared to him in his sleep. The Divine message was to the effect that the summit was unattainable by mortal man; but the angel

¹⁴ Wagner (*op. infra cit.* p. 166) says that at the time of the catastrophe the Armenian inhabitants numbered nearly 1600 souls, besides Kurdish labourers.

¹⁵ Von Behagel (*apud* Parrot, *op. cit.* 2nd part, p. 183) says 1000 feet. I quote Parrot p. 147.

¹⁶ Parrot, *op. cit.* p. 147. Von Behagel (*loc. cit.*) says that it was 3258 Paris feet, or 3472 English feet, above the plain of the Araxes.

¹³ For a discussion of the name see Parrot, *op. cit.* p. 110. Ritter (*Erdkunde*, x. 508) also refers to Brosset (*Bulletin de l' Acad. de Sc. de St. Pétersbourg*, 1841, vol. viii. p. 43), but is in error when he says that Brosset spells it Arghuri. He actually spells it Acorhi, and throws doubt upon the popular derivation of the name. It would appear that the old Armenian name for the place was Akuri or Agguri, and that later Armenian writers turned the word into Ark-uri in order to extract the signification which I have given in the text. I have adopted the spelling of the Russian official map, which practically reproduces the old word. Dr. Belck has made the ingenious suggestion that the Adduri of the Assyrian inscription of Shalmaneser II (859-824 B.C.)—a name which is applied to the mountains whither Arame, king of Urardhu or Ararat, fled before the armies of the Assyrian monarch—may be represented by the Armenian Akuri or Agguri (*Verhandlungen der Berliner Gesellschaft für Anthropologie*, 1893, p. 71). That the ancient name of a district often survives in that of a town in these countries is proved by the analogy of the town of Van, which bears the name of the kingdom of which it was formerly the capital, the Biaina of the Vannic texts.

deposited on his breast a fragment of the holy Ark, as a reward for his faith and pains.¹⁷ Beyond St. Jacob's, on the same or eastern side of the chasm and on the edge of the precipice, was situated a tiny shrine, built of hewn stone, at an altitude of about 1000 feet above the monastery.¹⁸ It stood by the side of one of the rare springs which are found on Ararat—a well of which the waters are still deemed to possess miraculous powers, and which still attracts numerous pilgrims from the plains. As you followed the gulf still further, the sides increased in steepness and the abyss in depth, until, at a distance of about two and a half miles from the cloister,¹⁹ it ended in an almost perpendicular wall of rock which towered up to the snowy cornice of the dome. Tournefort, whose description is in other respects fantastic, has used language to portray the aspect of the upper end of the chasm which testify to the greatness of the Saviour, as his Armenian companion observed. He could not help trembling as he overlooked the precipices, and he asks his readers, if they would form some conception of the character of the phenomenon, to imagine one of the loftiest mountains in the world opening its bosom to a vertical cleft. From the heights above, masses of rock were continually falling into the abyss with a noise that inspired fear.²⁰

On the evening of the 20th of June 1840 a terrific earthquake shook the mountain, and not only the shrine and cloister, but the entire village of Akhury with the sirdar's palace were destroyed and swept away. An eye-witness, who was pasturing cattle on the grassy slopes above the chasm on the side opposite to the shrine and the well, tells us that he was thrown on to his knees by a sudden reeling of the ground, and that, even in this position, he was unable to maintain himself, but was overturned by the continuing shocks. Close by his side the earth cracked; a terrific rolling sound filled his ears; when he dared look up, he could see nothing but a mighty cloud of dust, which glimmered with a reddish hue above the ravine. But the quaking and cracking were renewed; he lay outstretched upon the ground, and thus awaited death. At length the sounds became fainter, and he was able to look towards the ravine. Through the dust he perceived a dark mass in the hollow, but of what it was composed he could not see. The sun went down; the great cloud passed away from the valley; as he descended with his cattle in the failing light, he could see nothing within the abyss except the dark mass. Another spectator has left us an account of the various phases of the phenomenon, as they were experienced from a standpoint below the village. He happened to be working in a garden a few versts from Akhury, on the side of the plain. His wife and daughter were with him; two of his sons appeared towards evening and brought him a report about his cattle. Two riders, returning to the village, exchanged a few words with the party, and rode on. The sun was beginning to sink behind the mountains, and he and his people were preparing to go home. In an instant the ground beneath their feet oscillated violently, and all were thrown down. At the same time loud reports and a rolling sound, as if of thunder, increased the panic into which they fell. A hurricane of wind swept towards them from the chasm and overturned every object that was not firm. In the same direction there arose an immense cloud of dust, overtopped, towards the upper portion of the ravine, by a darker cloud, as of black smoke. After a momentary pause the same phenomena were repeated; only this time a dark mass swept towards them from the direction of the village with a rolling and a rushing sound. It reached the two riders; they were engulfed and disappeared. Immediately afterwards the two sons were overtaken by the same fate. The mass rolled onwards to the gardens, and broke down the walled enclosures. Large stones came tumbling about the unfortunate peasants; and a great crag swept down upon the prostrate witness, and settling by his side, caught his mantle fast. Extricating himself with difficulty, he succeeded in lifting his unconscious wife and daughter from the earth, and in flying with them over the quaking ground. After each shock they could hear the sound of cracking in the chasm, accompanied by sharp reports. They were joined by fugitives, escaping from the neighbouring gardens, and they endeavoured to make their way to Aralykh. It was morning before they reached their goal; during the night the sounds and shocks continued, always fainter but at periodic intervals. This catastrophe was followed on the 24th of June by a second and scarcely less momentous collapse. On this occasion a mass of mud and water burst from the chasm, as though some colossal

¹⁷ Parrot, *op. cit.* p. 135; Dubois, *op. cit.* vol. iii. p. 471. Most travellers tell this story with amplifications and variations. It is to be found in its earliest form in Faustus of Byzantium (book iii. chap. x.).

¹⁸ Parrot, *op. cit.* p. 205.

¹⁹ Von Behagel, *apud* Parrot, *loc. cit.*

²⁰ Tournefort, op. cit. vol. ii. p. 368 seq.

dam had given way. Blocks of rock and huge pieces of ice were precipitated over the base, and the flood extended for a space of about thirteen miles. Not a trace was left of the gardens and fields which it devastated, and the Kara Su was temporarily dammed by the viscous stream.²

It is to the credit of the times in which we live that no such event could now occur in Russian territory without exhaustive and local scientific investigation, while the results of the catastrophe were still fresh. The task of reporting to the Government was entrusted to a Major of Engineers, who was ordered to open an enguiry on the spot. His account was to the effect that masses of rock were precipitated into the chasm from the overhanging heights; that they were accompanied in their descent by vast quantities of snow, unloosed by the sinking foundations of the uppermost seams. A river of boulders and snow and ice streamed with lightning rapidity down the gulf, buried the cloister and the village with all its inhabitants, and choked up the trough of the abyss. The earthquake was attended by the opening of fissures in the ground, from which there issued water and sand, and even flames.²² The mention of this last phenomenon appears to have aroused the curiosity of men of learning, and to have excited in them a strong desire for further light. The site was visited in 1843 by a German man of science, Dr. Wagner, and in 1844 by the great geologist Herrmann Abich, whose researches are always careful and complete.²³

These two authorities unfortunately arrived at opposite conclusions as to the character of the convulsion. Wagner begins by discrediting the account of the Russian Major, and suggests that he had never left the walls of Erivan, having lost his travelling money at play. He considers it absurd to suppose that the mass which destroyed Akhury and the fragments of rocks which were projected far and wide can be attributed to the operation of purely seismic forces, dislocating the crown and sides of the abyss. They must have been due to eruptive volcanic action, of which he thought he could see the traces at the upper end of the chasm, the site, according to his view, of one of the old craters of Ararat. They were impelled through the air by steam and escaping cases from a fissure in the bottom of the ravine. We must therefore form the conception of an eruption accompanied by an earthquake, not of a landslip effected by seismic shocks.²⁴

That this theory is open to objection on the simple ground of probability, it does not require scientific knowledge to perceive. In the first place an eruption of Ararat is unknown within the historical period; in the second, the destruction of Akhury was only one of many catastrophes, which were occasioned by earth movements on the same day. On that same evening the valley of the Araxes was visited by a violent earthquake, and thousands of houses were overthrown.²⁵ It is true that Wagner supposes an eruption of steam rather than of fire, and favours the hypothesis of vast reservoirs of water beneath the mountain having burst in upon the molten mass below. But this ingenious supposition is rendered unnecessary and improbable by the minute researches of the next trained worker in the same field. Abich asks how it would be possible for eruptive action to have broken forth in a narrow valley—on such a scale that huge crags of 100 to 150 feet in circumference were propelled for a distance of over three miles²⁶—without leaving any trace of volcanic electamenta on the adjoining heights and on the slopes beyond. A careful examination of the disposition and character of the debris, as they were disclosed within the trough of the chasm, as well as on the surface of the base of the mountain, established in his mind the veracity in all essentials of the official version of the Russian Major of Engineers. He observed that the fragments of rock which are strewn over the basal slopes before the entrance to the chasm is reached, become concentrated as you proceed, and are collected into long ridges of

²¹ The testimony of these witnesses is given by Abich, *Geognostiche Reise zum Ararat*, with two drawings of the chasm, in Monatsberichte der Gesellschaft für Erdkunde zu Berlin, series 2, vol. iv. 1846-47. The account is reproduced in his Geologische Forschungen in den kaukasischen Ländern, Vienna, 1882, part ii. pp. 395 seg., and illustrated by a fine geological view of the chasm in the Atlas, plate vi, It can best by understood in the reprint. See also Wagner. op. inf. cit., and Ritter, Erdkunde, x, pp. 507 seq. ²² See the summary of this report in Ritter, *Erdkunde*, x. pp. 509 seq.

²³ See Moriz Wagner (*Reise nach dem Ararat und dem Hochland Armenien*, Stuttgart, 1848, contained in Widermann and Hauff, Reisen und Landesbeschreibungen, Lieferung 35), and Abich in op. cit.

²⁴ Consult the argument in Wagner, op. cit. pp. 176 seq.

²⁵ See Ritter, *Erdkunde,* x. 510; and for former earthquakes see Dubois, *op. cit.* vol. iii. p. 474; Abich, *Geolog. Forsch.* Part ii. pp. 390 seq. with map.

²⁶ "5 versts in a direct line" are Abich's words, op. cit. p. 413.

boulders, which issue from the mouth of the gulf. Yet not a single one among these fragments was found to be identical in nature with the fragments on the adjacent valley sides. How account for this striking circumstance on the hypothesis of an eruption from fissures along the base of the valley? When he came to investigate the origin of these piled-up boulders, he discovered that they exactly corresponded with the rock of the seams, which are found along the upper end of the chasm, overhanging the abyss. He was even able to ascribe approximately the former position of the largest of the crags, which recline upon the base to a site on the left wall of the chasm, immediately beneath and supporting the snows. From his writings we may extract the following explanation of the phenomena to which the destruction of Akhury was due. The upper structure of Ararat had been seriously weakened on the north-eastern side by the slow but persistent action of snow and ice, and by the corrosive tendencies of veins of sulphurate of iron. The earthquake precipitated portions of the higher seams into the chasm, together with masses of snow. A dense cloud of dust was induced by the falling rocks, and the setting sun lent to this cloud a lurid hue. Immense quantities of boulders were hurried down the trough of the chasm, accompanied by a stream of mud and melting ice. The course of this composite current was directed upon the village by the configuration of the left wall of the chasm. As the sides of the valley fell in, its upper portion became obstructed at the neck or narrow, which still exists about at the point where the little shrine used to overlook the abyss. A mighty dam was formed by the fallen masses, and the head of the valley became a huge morass. Further lapses of rock and snow took place from the summit region, and the heats of June dissolved the frozen elements in the morass. On the 24th the dam yielded to the overpowering pressure, and the second act of the catastrophe was fulfilled.

As a result of this earthquake, the ridge enclosing the uppermost end of the chasm was found to have acquired about double its former extent. The height of the precipice had also increased considerably, especially on the eastern side. The summit remained intact, but the fabric of Ararat lay henceforth exposed to its innermost core.²⁷ We set out at a quarter-past eight in the morning, mounted on little hacks. The Armenian Makar, who had accompanied us on the previous expedition, was deputed to be our guide. It took us some twenty minutes to cross the belt of sand and camelthorn at a pace of about six miles an hour. Then the ground commenced to rise with more perceptible acclivity, and we made our way across the massive base. The still air, and the restfulness of the stately fabric before us exercised upon us their now familiar spell. Grey clouds enveloped the snows of the summit region, collected above a veil of tender mist.

We were pointed towards the entrance to the chasm, and we noticed that, in that direction, there exists a considerable concavity in the surface of the base. One might almost form the conception of a flaw in the mountain, extending to the pedestal upon which it is reared. On either side of us, but more especially on our left hand, the rounded contours of the basal slopes were curving inwards to a wide depression, up the trough of which we rode. Is this feature the result of landslip and of floods issuing from the chasm, or was the pedestal always weaker upon this side? I am inclined to ascribe it in part to an inherent defect in the structure, which has been enlarged and accentuated in the process of centuries. It would appear that the streams of lava which fed the base on the northwest and southeast were not directed in equal volume to these north-eastern slopes. Such a distribution of the molten matter, which contributed to build up the fabric, would account, at least in some measure, for the subsequent subsidence of Ararat on this its north-eastern flank.

As we proceeded, this hollow formation became more pronounced; we were approaching the mouth of the chasm. We observed how much more copious was the flora which covers this portion of the base. In place of the burnt herbage over which we had ridden on our journey to Sardar Bulakh, we here admired an abundant growth of low and thorny bushes of which the tiny and delicate pink and white flowers were showered upon a ground of grey and green (*Atraphaxis spinosa*). Long streamers of sansola (*Kochia prostrata*, Schrad.) bent towards us, and gigantic yellow grasses rose like spears (*Calamagrostis epigejos*, Roth.). The stream, which issues from the chasm—exhausted at this season—feeds and fertilizes the sandy soil, and, perhaps, the layers of mud, which were left by the flood of 1840, have not been without effect on the nature of the land. We were reminded of that catastrophe by the huge fragments of conglomerate rock, which are strewn over the hollow throughout a considerable area. On our return I took a photograph of the largest of these crags, where it lay, among bouquets of spangled atraphaxis, outlined against the

sky (Fig. 38). Abich informs us that the fragment which lies immediately in front of it was incorporated with it at the time of his first in 1844; the mass then measured at the base 285 feet in circumference, with a height of 45 feet.²⁸ I have already said that this careful investigator was able to trace its origin to a site at the upper end of the chasm, overhanging the abyss. According to his theory, it must have fallen in after the first act of the catastrophe, and been transported in the course of the second act to its present place. It was pushed down the trough of the ravine and over the gently incline of these basal slopes by the action of the viscous stream, until that action lost its force when the stream was freed from the compression of the gorge and radiated outwards over the pedestal.²⁹ To us plain people the position of these crags was a source of amazement, and the Greeks would have made the chasm the residence of a Cyclops who hurled such missiles at adventuresome men.

At half-past ten we halted at a small Kurdish village, situated at the mouth of the chasm. These Kurds have erected hovels of loose stones with roofs of mud, and they can boast or deplore, in the person of a starshina, a direct official connection with the Russian Government. It was amusing to see a Kurd in the dress of a Russian dignitary stepping out to meet his European visitors. He wore a dark blue coat; a large brass badge of office hung upon his breast. Ever since the great convulsion the Kurds have haunted the site of Akhury, rummaging for anything valuable in the buried ruins. Makar explained to us that we were now standing where once stood the prosperous township, with its ancient church and pleasant gardens. The woods of apricot, the rich vineyards have disappeared entirely; it would be difficult to discover a single tree. Just west of the miserable hamlet you still remark the deep watercourse, which is the principal vent for the drainage of the ravine. The channel is dry at this season, and is overhung by steep banks some 100 to 150 feet height. We observed that these banks are composed of a sandy soil, inlaid with rocks. Yet the valley, even in autumn, is not entirely devoid of water; here and there we were refreshed by the sight of growing grass, and by the sound of little runnels. The trough of the ravine has at this point an elevation above sea-level of about 5570 feet. while its sides, which are formed by the cleft in the base of the outer sheath of the mountain, are as yet scarcely more than 200 feet high. It extends almost in a straight line, and in a southwesterly direction, to the very heart of Ararat. The flanking cliffs rise and the valley narrows, until the formation assumes the proportions of a gulf many thousands of feet in depth, overhung by the snows of the summit region. Imagine a gigantic cutting, with a length of several miles, at the uppermost end of which an almost perpendicular precipice supports the snowy roof of Ararat! Even from this standpoint we could perceive the vertical seams at the head of the chasm, shadowed walls of grey rock with veins of orange hue, the higher ledges sprinkled with the first snows of autumn and half concealed by light, dissolving mist.

We mounted to the top of the cliff on the right or eastern side of the ravine, in order to obtain a view on either hand. Towards the east stretched the contours of the upper portion of the base, clothed with withered grass and strewn with stones. Abich tell us that these fragments are different in origin and character from the boulders and stones in the trough of the ravine; and, as we have seen, he uses the fact as a powerful weapon against the eruptive theory which Wagner propounds. Looking across the valley, our eyes rested on a little settlement on its opposite or western flank. It occupies a higher site than that of the Kurdish village, and may have been about a mile distant from where we stood. It interested us as well by its lonely and dangerous position as by an adjacent and isolated group of trees. It is called New Akhury, and, according to the official statistics, contains a population of some 400 Tartar inhabitants. It is the seat of a Cossack station, and bids fair to increase in size before the next earthquake shall sweep it away.

Makar directed our attention to some fallen gravestones, not many yards distant from where we stood. They are the remains of the cemetery of the old Akhury, and among them we admired several crosses with rich chasing in the old Armenian style. We found them overgrown with a thick, orange-hued lichen, resembling the appearance of rust. He told us that many of his relations had been buried in this graveyard, and he pointed out in particular a group of seven stones. He said that they marked the graves of seven brothers who had been killed in the gardens of the vanished township by the attacks of a single snake.

After regaling ourselves with delicious milk and eating an egg or two, we started at noon on our excursion up the ravine. We made our way along the eastern side of the chasm, sometimes picking our course as we might among the

boulders, at others following a beaten path on higher ground. Not far beyond the hamlet we noticed a little spring, of which the water was trickling over. The next object to excite our interest was the peculiar formation of the floor of a side valley, in which we found ourselves at half-past twelve. Throughout an area of some 350 by 200 yards the ground was perfectly level, like a billiard table, with a smooth surface of sand and little pebbles. The length of this round ellipse followed the direction of the main ravine, which lay at the site of the shrine, but perhaps a little lower down. The site itself has an elevation above sea-level of about 7500 feet³⁰. The camera has belittled the natural features, and I must ask my reader to interpret my picture with the help of the reflection that the snows, which overhang these perpendicular precipices, are nearly 17,000 feet high. We penetrated further up the romantic valley, along the bed of a dry watercourse. Skirting the buttresses of the eastern wall, we observed that they were composed of a compact grey andesite with something of the appearance of slate. Seams of a rock similar in character, but which have turned red in weathering, lend variety to the surface of these bold bastions; while the dark face of the wall which mounts to the summit region is scored by extensive veins of that decomposed and orange-hued lava which spells destruction wherever it appears. The bottom of the ravine is covered by a deep beach of boulders, worn by the action of ice and water. Animal life is represented by a flock of crows or jackdaws, which croak and circle round you as you advance.

Behind the lofty wall of rock which is seen on the left of my illustration, in jagged outline against the snows, a glacier descends from the summit region which is probably the only true glacier on Ararat, and which I should judge to be gradually decreasing in extent. According to Abich, the long ridges which have the appearance of piles of boulders, and which are seen in his illustration descending the trough of the chasm to a point some distance below St. Jacob's Well, were composed in 1874 of compact and dirty glacier ice, covered over with stones and débris. He informs us that in 1844 there was a direct but deeply buried connection between this ice and the ice in the circus at the lower end of the glacier; and that in 1874 this connection had been severed, and the ice-hills themselves had decreased about one-third in height.³¹ On the top of these ridges he discovered a series of marshes and little lakes, of which the largest was several hundred paces in circumference. I cannot testify myself to the present condition of these ice-hills; I cannot even say that they exist. I did not see any ice in the trough of the chasm, although it was evident that its present condition was largely due to ice action, and although we admired a little lake of glacier water, set like a turquoise in the waste of mud and stones. It is computed that the actual glacier descends as low as a level of about 8000 feet—a notable fact when we consider that the line of perpetual snow on this side of Ararat is as high as 14,000 feet.

We lingered for some little space in the ravine beyond St. Jacob's Well, waiting for the clouds to lift. But they hung jealously about the upper slopes of the precipices, whence a mist descended upon us like rain. The mountain thundered; from time to time the mist was gently parted, and gave passage to the sun. If we were disappointed of a clear view of the higher regions, we were at least able to appreciate to the full the vista down the weird chasm to the fair landscape of the plain. The comparative straightness of the gulf renders such a prospect possible, even from its uppermost end. No projecting spur or interposed eminence obstructs the continuous stretch of the hollow outlines to the distant campagna of the riverside. On the horizon were the crinkled mountains in the direction of Lake Sevan, flushed with tints of delicate yellow and amethyst, lightly shaded with opal hues. Deep gloom lay upon the floor of the abyss, and only the pools of blue glacier water caught the brilliance of day. On the open base beyond these shadows the sinuous lines of dry watercourses led the eye into the expanse of the plain; and we could still see the recumbent blocks which once hung in pinnacles above the spot upon which we stood.

Evening was drawing in when we again reached the entrance to the chasm. We skirt the Kurdish village, we pass a pool of water and a group of barefooted Kurdish girls. Away on our left are the mud houses of the Tartar settlement,

³⁰ This was the reading of my Hicks mountain aneroid, which was working well, and it agrees with Parrot who says that the shrine stood about 1000 feet above the cloister, *i.e.* at about 7400 English feet. I fear, therefore, that Madame Chantre is in error in ascribing to the site of the cloister, much lower down, an elevation of 2250 metres or 7382 feet (*L'Arménie Russe*, p. 238). Monsieur Chantre, in his monograph on Ararat, confuses the site of the shrine with that of the cloister, an error which was also made by my Armenian guide (*Annales de Géographie*, Paris, 1893-94, vol. iii. pp. 81-94).

³¹ Abich, *Geolog. Forsch.* part ii. p. 412, and see for the glacier, etc. pp 397, 399, 400. The illustration is contained on Table VI. of his atlas. Parrot appears to be silent on the subject of this glacier; but Von Behagel, his companion, offers some remarks upon it (Parrot, 2nd part, p. 184). I may also refer my reader to Dr Markoff's article in the *Bulletin de la société royale Belge de géographie*, 1888, p. 589.

and the green clump of trees. To these succeed the bouquets of pink and white atraphaxis, and the scattered crags of conglomerate rock. A flora of great variety starts from the sand and among the stone. While we are crossing this upper region of the base, the sun disappears behind the still, grey clouds; the blue zenith pales and fades. A full moon rises from the grey clouds, wreathing the landscape with soft lights...

SUPPLEMENTARY NOTE

The identification of Mount Ararat with the mountain upon which the Ark rested is at least as early as the adoption of Christianity by the Armenians, and may have been originally made by Jewish prisoners of war. But there does not appear to have existed in the neighbourhood of Ararat an independent local tradition of the Flood; and the mountain is still locally known not as Ararat, but as Masis to the Armenians, and as Aghri Dagh to the Tartars. It is, however, called Ararat in Armenian literature as early as Faustus of Byzantium, who uses the name in relating the story of St. Jacob of Nisibis (Faustus, iii. 10, the name appears to have been wrongly spelt Sararat by the copyists). The Ararat of Scripture is the Assyrian Urardhu; and the "mountains of Ararat" of Genesis viii.4 must be sought within the country of Urardhu. Dr. Belck has guite recently examined, in the light of his remarkable researches into the lore of the Vannic texts, the question of the original geographical application of the term Urardhu (Zeitschrift für Ethnologie, Berlin, 1899, pp. 113 seq.); it appears to have spread from a district in Kurdistan, southwest of Lake Urmi, to the country about Lake Van. It would, therefore, seem that the tendency of the term has been to travel north; for the Urardhu or Ararat of the historical period is the province about Mount Ararat, one of the great divisions in the kingdom of the Arsakid monarchs of Armenia, and well known under the name of Ararat to Agathangelus and the earliest Armenian writers. Mount Ararat could scarcely have been known to the peoples of the lowlands, among whom the Biblical legend of the Flood originated. Various aspects of the subject are well discussed by Suess (Das Antlitz der Erde, Leipzic, 1885, vol. i. pp. 25-92; Die Stintfluth), Bryce (Transcaucasia and Ararat, edition of 1896, pp. 211 seq.), and Sayce (Dictionary of the Bible, London, 1898, sub voce Ararat).

The fabric of Ararat composes an elliptical figure with an axis from northwest to southeast. The base plan measures about 28 miles in length, and about 23 miles in width. The fabric is built up by two mountains: Great Ararat (16,916 feet above the sea) and Little Ararat (12,840 feet). Their bases are contiguous at a level of 8800 feet, and their summits are 7 miles apart. Both are due to eruptive volcanic action: but no eruption of Ararat is known to have occurred during the historical period, and the summit of the greater mountain presents all the appearance of a very ancient and much worn-down volcano with a central chimney or vent, long since filled in. I have already described the summit region of Great Ararat. The estimates or measurements of my predecessors are at variance with one another in detail; but one may assert that it consists of two separate elevations, divided one from the other by a depression some 100 to 150 feet in depth. The more easterly is much the larger, having the character of a spacious platform of saucer-like form. The more westerly presents the shape of a symmetrical cone, when seen from the platform; and is in connection with the snow-laden and almost horizontal bastions at the head of the northwestern slope. Both elevations have about the same height; but, if anything, the more westerly is the higher.³² The reader will be able to distinguish them in my photograph (Fig. 37), as well as to observe how they mingle together as mere crinkles in the crown of the dome. Parrot was inclined to think that the Ark came to rest in the depression between the two elevations.

Yielding in height to the most lofty peaks of the Caucasus in the north (Elburz, 18,525 feet), which are visible from the summit, and to Demavend (over 18,000 feet) in the belt of mountains which rise along the southern shore of the Caspian Sea, Ararat is by far the loftiest of the mountains of Armenia, and is over 1000 feet more elevated than the highest peak in Europe, Mont Blanc (15,780 feet). Moreover, Elburz and Kazbek, Mont Blanc, and even Demavend, all rise among a sea of mountains, of which they are little more than the highest crests. The isolation of Ararat is not its

³² Feodoroff, the companion of Parrot, measuring from the valley of the Araxes, estimated the difference at 7 feet; Khodzko at 120 feet; Bryce at "some 50 feet or so," all in favour of the more westerly elevation. My reader will notice that in the photograph (Fig. 37) the more easterly, viz. on the left hand, appears to be slightly higher; but this circumstance is due to the fact that it stands out a little in advance of its neighbour, when seen from the side of the country between Erivan and Aralykh.

least interesting feature—a feature which I would fain hope is already imprinted upon my reader's mind. The plains which it overlooks belong to three empires; the frontiers of Persia, Turkey, and Russia meet upon its slopes.

It has been estimated that as late as the month of May the colossal mountain is covered with snow to a level of 9000 feet below the summit; and the appearance of this immense white sheet from the blooming campagna of the valley of the Araxes is one of the fine sights in the world. But by the month of September the snowy canopy will be confined to the dome of Great Ararat; and the limit of perpetual snow on the side facing the plain on the north is not less elevated than from 13,500 to 14,000 feet above the sea. The extensive depression through which the Araxes flows collects the heats of summer; and the warm air from this reservoir ascends the northern slopes of the mountain, melting the snow to a height which is greater than might be expected in this latitude.³³

Further east-wards the irrigation is supplied by the Kirk Bulakh, a stream of which the name signifies forty springs, and which has its sources at no great distance from Erivan. Such abundance of running water should secure to this growing city a large measure of prosperity under settled government. As the centre of the most populous of the Armenian provinces of the Russian Empire, to which it gives its name, it is already a place of some pretensions. But the inhabitants do not at present number more than 15,000, of whom half are Tartars and half Armenians. This total also comprises about 300 Russians, whose most conspicuous units are the drivers of the carriages on hire, belonging, I believe, exclusively to the Molokan sect.³⁴ Erivan does not possess any monuments of first-rate merit or of great antiquity. Her origin is obscure. Noah may quite well have lived here before the Deluge, as one of the earliest of modern European visitors was informed by his Armenian friends.³⁵ The popular derivation of the name is from the Armenian verb *erevel*, and it is said to signify *appearing*. The place would, indeed, be about the first locality in the plain region to appear to the eyes of the patriarch of old.³⁶

Hither he may have been directed in his steps and those of his family when the waters had receded from a world renewed. This may be the site of the original city of Noah, perhaps preserved beneath the soil upon which is built the present town. The more learned are inclined to a much later foundation, but do not yield in point of philological plausibility to the champions of the identification with Noah's city. They say that the name has been shortened from Erovantavan, which they render *the place where Erovant was defeated*. Erovant or Ervand was an Armenian monarch of the first century who was vanquished in this region by the lawful heir to the throne of the Arsakids at the head of a Persian army. The event and the survival of the name Erovantavan are attested by Moses of Khorene.³⁷

[Proceeding to Etchmiadzin,] I was received by an Armenian gentleman, of the handsome aquiline type of face, who addressed me in fluent English. He had been interpreter to the delegates to the Berlin Congress, and more recently had been much in the society of the Katholikos, residing at Jaffa (Jerusalem). Baron Scrapion Murad—the first name is the equivalent of Mr.—holds a position of the first importance in the counsels of His Holiness at this junction in his career. He is the shrewd man of the world, who weighs you in the balance with a single glance of his intelligent eyes. I appear to have emerged on the right side of the scale; for his formidable scrutiny rapidly relaxed into an amiable smile. We passed from this outer room into a chamber with a daïs at the further side; and presently the Katholikos entered and mounted the daïs, begging us be seated on two chairs which were placed on the floor below, but quite close to his own arm-chair.

³³ In estimating the level of the zone of perpetual snow on Ararat I am leaving out of account those smaller or greater collections of snow which owe their subsistence all through the summer to special circumstances, such as shelter from the sun. Mr. D. W. Freshfield (*Exploration of the Caucasus*, London, 1896, vol. i. p. 55) gives 10,000 feet as a fair figure for the snow-level in the central chain of Caucasus.

³⁴ According to the Jesuit, Père Monier, who wrote an account of the mission at Erivan in the eighteenth century, there were only 4000 inhabitants of the town proper in his day. Of these only one-fourth were Armenians (*Lettres Édifiantes, Mémoires du Levant*, Paris, 1780, vol. iii. p. 25). In the thirties of last century the usual estimate seems to have been 2500 families or at least 10,000 souls, of whom some 700 to 1000 families were Armenian (Smith and Dwight, *Missionary Researches*, p. 279; Sijalski, *Aufenthalt in Erivan, Das Ausland*, Augsburg, 1839). The Armenians are rapidly turning the tables upon the Tartars.

³⁵ Chardin, edit. Paris, 1811, vol. ii. p. 169.

³⁶ "Erivân, apparens, quia regio ista prima apparuit Noe cum descenderet ex monte Ararat" (Villotte, *Dict. Arm.* p. 273, quoted by Langlès ap. Chardin, *loc. cit.*).

Moses of Khorene, vol. ii. p. 46.

I do not remember having ever seen a more handsome and engaging face; and I experienced a thrill of pleasure at the mere fact of sitting beside him and seeing the smile, which was evidently habitual to those features, play around the limpid brown eyes. The voice too is one of great sweetness, and the manner a quiet dignity with strength behind. The footmen and the daïs and the antechamber were soon forgotten in this presence—forms necessary to little men and perhaps useful to their superiors, though they are always kicking them off when they are not stumbling among their folds…first, which adjoins the central altar, is inscribed with the name of Petros Katholikos (Peter II. 1748) and is said to have been a present from the Pope.³⁸ The second, situated further east, is that which was occupied by the Katholikos during the service which I attended. It is the gift of Armenians during the pontificate of Astvatsadur (1715-25).

The treasury and room of relics contain many interesting objects. To these chambers is allotted the building on the east of the church. Both are entered from the interior and through doors in the east wall, that on the north of the apse communicating with the treasury, and that on the south with the apartment containing the relics. Among the treasures are several objects, which deserve the attention of the student of art, examples of mediæval Armenian craft being, I imagine, none too frequent. I observed a crystal cross, said to belong to the Bagratid period, and some other crosses reputed to have come from Ani. A gold crown, inlaid with jewels, is ascribed to King Tiridates, and, whatever its origin, is a very interesting object. The same may be said of a silver saucer with repoussé figures dating from the pontificate of Nerses IV (1166-73). There are a quantity of jeweled mitres and embroidered stoles and ornaments for the church. There are seals of the pontiffs and coins of the Rupenian (Cilician) dynasty. Some store is set upon a head of Dionysus which is believed to be of Egyptian origin. The monastery has become possessed of a most curious object in the shape of a huge caldron, standing on three legs, and having as handles four tigers in the act of climbing. It was found not many years ago in a cloister near Tiflis: buried within it was a bell. An inscription round the rim gives the date of the Armenian era 781 or A.D. 1331. In the chamber of relics are preserved a fine collection of Episcopal staves surmounted by a cross above a knot of hissing serpents' heads (Fig. 56, Nos. 1 and 2). Many are of exquisite workmanship. The principal relics are the hand and arm of St. Gregory, preserved in a silver gilt case; the head of the holy spear, reputed to possess the power of staying epidemics;³⁹ a fragment of the Ark, which is attached a jeweled cross; the head and arm of St. Thaddeus, the apostle; the hand and arm of St. Jacob of Nisibis; a panel carved with a crucified Christ, said to be the work of St. John the Apostle and to have been procured by Ashot Patricius; finally a box containing relics of St. Ripsime.

The **chapels of the martyrs**, which are churches rather than chapels, are situated within short walks from the monastery. Thus St. Gaiane is not more than about a quarter of a mile distant in a southerly direction. St. Ripsime is a little further, say three-quarters of a mile; it is placed to the east of Edgmiatsin [Etchmiadzin, Armenia just across the Araxes from Aralyk and Ararat] and is the first building which you see as you drive from Erivan, on the very outskirts of the trees and greenery. Shoghakath is a near neighbour of Ripsime on the side of the great cloister.

Of these the largest and certainly the most interesting is that which commemorates the brave deeds of the beautiful virgin from Rome. In designing the **church of the Holy Ripsime** the architect has been faithful to the essential features of that of Edgmiatsin—the quadruple apse and the central dome. But the problem before him was how to eliminate the unsightly projections of the apsidal arms, and how to rear the whole fabric by successive stages to the crown of the dome. His solution of the problem, if somewhat rudimentary and fantastic, is certainly successful from the point of view of looks (Fig. 57 and plan). My reader will of course eliminate the portal and belfry in appreciating this piece of architecture. They were added, the portal in 1653 by the Katholikos Philippos, and the belfry in 1790. He will observe that the outer wall compose a rectangular figure; and a moment's reflection will show him that such a figure could only be presented by a stupendous thickening of the wall on either side of each apse. This difficulty has been in part surmounted by the introduction of niches, two for each apsidal recess. These external niches are nearly six feet deep on the north and south sides, a little shallower on the west and east. The treatment of this feature is quite inchoate; but we shall see it in perfection at Ani. At the same time it is evident that provision had to be made for

³⁸ Telfer (Crimea and Transcaucasia, London, 1876, vol. i. p. 231) seems to refer this throne, which he ascribes to Pope Innocent XI., a gift to James IV. (1655-80).

a side chapel on either side of the apse on the east. These have been supplied according to a design which I have not seen elsewhere, although it appears to be repeated in the church of Sion in the valley of the Tana, a tributary of the Kur, erected at the end of the tenth century.⁴⁰

Chapter XVII – To Ani And To Kars

Descrying horses in the direction of Ani, we galloped forward and overtook them; they proved to be our missing cavalcade. They had passed the river at a place lower down than where we had crossed it, and were pursuing their way in a most leisurely manner. After opening one of the cases in order to replenish the slides of the camera, we returned to the glen, and again forded the stream. We spent a considerable time at the cloister and in its neighbourhood; it was certainly the most remarkable building which we had yet seen. Reserving a description of its ancient church and halls of audience, I shall only refer to a couple of illustrations in this place. The one (Fig.93) shows the ensemble of the monastery; but, having been taken from the east, where the ground is open and the landscape tame, misses the peculiar characteristics of the site. The other (Fig.94) may convey some conception of the appearance of the glen, when seen from the river-bed below the cloister. From the flat and water-worn bottom rises a little tongue of higher land, upon which stand the remains of two little chapels. On the cliff above the ravine you see the pier of a ruined gateway, outlined against the sky. The track to Ani leads up the cliffside and passes that ruin, which stands on the plain in which the still-distant city lies.

It was late afternoon when we reached the walls of the ancient capital (Fig. 70), and passed within the great gateway. No massive doors creaked upon their hinges; we rode through empty archways into a deserted town. From among the débris of the public and private buildings rose the well-preserved remains of a number of handsome edifices – here an elegant church, there a polygonal chapel. An old priest with a few attendants were the sole inhabitants – they and the owls. We had only to follow the track to be brought to the humble tenement in which the priest lived. He stepped forth to meet us, a grey head, a feeble figure; he walked with difficulty, and with the demeanour of a man who is awaiting death. He told us that he had dwelt here since 1880, the only custodian of these priceless architectural treasures, and the only exponent of the topography of the site. He had been attacked in his house by a band of Kurds in 1886; they had inflicted knife wounds, and stripped him of everything he possessed. We remained two whole days within the walls of Ani, examining the creations of a vanished civilisation, and collecting material with which I propose to deal in a separate chapter. At nine o'clock on the morning of the 19th of October we took leave of our aged host; and, leaving the city by the same gate through which we had entered it, pursued a track, which leads in the direction of Kars.

Clouds were clinging to the hill slopes upon our point of course and concealing the shield-shaped mass of Alagoz. Lost fragments of opaline vapour lay on the surface of the grassy plain. Here and there we perceived the ruins of little chapels and other buildings, or the scattered débris of masonry. From these suburbs we looked back upon the bold line of the city walls, with their double girdle and towers at regular intervals. It seemed as though the stream of life had wandered off into other channels, leaving behind this eloquent evidence of its former course. We could not descry the form of man or of animal in the landscape; even the sky was without a wing.

