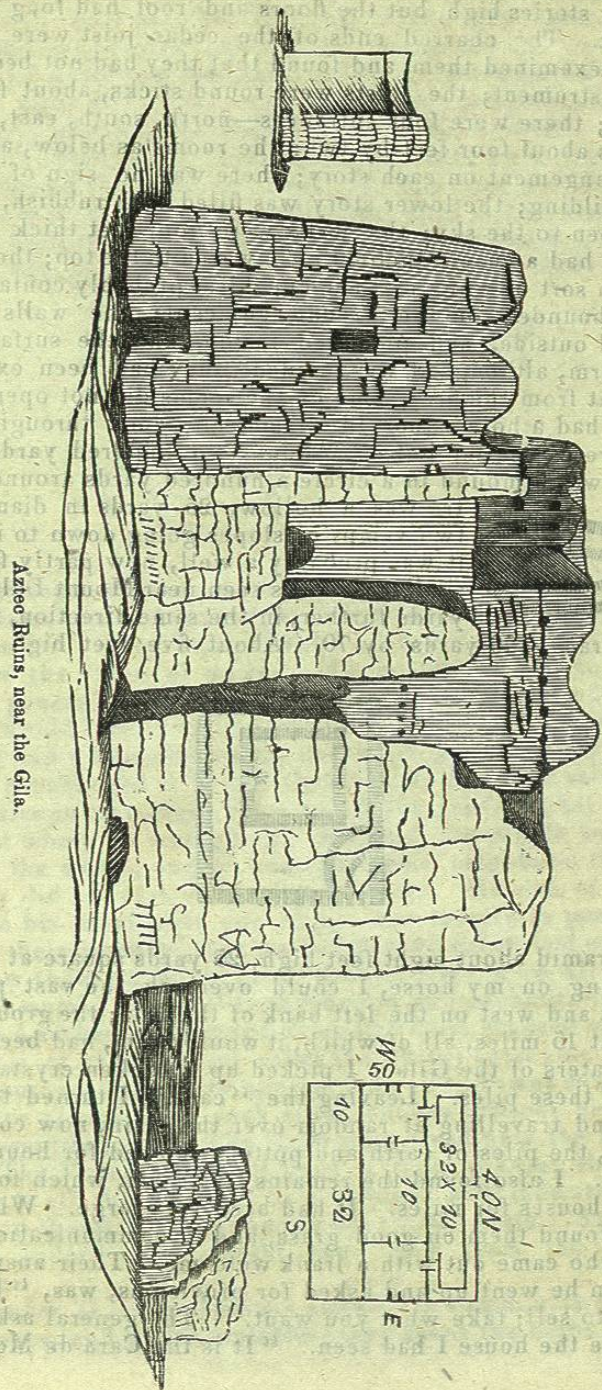


strewn with pottery. The camp was near a vast profusion of pottery. I found a beaver tooth on the ground, and remains of sea-shells; the ground about the houses is always strewn with broken pieces of flint rocks, of a few inches in diameter. We encamp in soda grass, quite abundant, running a mile or more along the direction of the road.

November 10.—Marched about 8, and after marching six miles, still passing plains which had once been occupied, we saw to our left the "Cara de Montezuma." I rode to it, and found the remains of the walls of four buildings, and the piles of earth showing where many others had been. One of the buildings was still quite complete, as a ruin. The others had all crumbled but a few pieces



Aztec Ruins, near the Gila.

of low, broken wall. The large cara was 50 feet by 40, and had been four stories high, but the floors and roof had long since been burnt out. The charred ends of the cedar joist were still in the wall. I examined them, and found that they had not been cut with a steel instrument; the joists were round sticks, about four feet in diameter; there were four entrances—north, south, east, and west; the doors about four feet by two; the rooms as below, and had the same arrangement on each story; there was no sign of a fireplace in the building; the lower story was filled with rubbish, and above it was open to the sky; the walls were four feet thick at the bottom, and had a curved inclination inwards to the top; the house was built of a sort of white earth and pebbles, probably containing lime, which abounded on the ground adjacent; the walls had been smoothed outside, and plastered inside, and the surface still remained firm, although it was evident they had been exposed to a great heat from the fire; some of the rooms did not open to all the rest, but had a hole a foot in diameter to look through; in other places, were smaller holes. About two hundred yards from this building was a mound in a circle a hundred yards around; the centre was a hollow, 25 yards in diameter, with

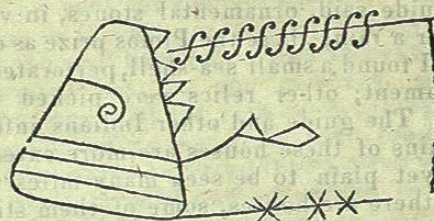


two ramps or slopes going down to its bottom; it was probably a well, now partly filled up; a similar one was seen near Mount Dallas. A few yards further, in the same direction, northward, was a terrace, 100 yards by 70. About five feet high upon this,



was a pyramid about eight feet high, 25 yards square at top. From this, sitting on my horse, I could overlook the vast plain lying northeast and west on the left bank of the Gila; the ground in view was about 15 miles, all of which, it would seem, had been irrigated by the waters of the Gila. I picked up a broken crystal of quartz in one of these piles. Leaving the "cara," I turned towards the Pimos, and travelling at random over the plain, now covered with mesquite, the piles of earth and pottery showed for hours in every direction. I also found the remains of a sicia, which followed the range of houses for miles. It had been very large. When I got to camp, I found them on good grass, and in communication with the Pimos, who came out with a frank welcome. Their answer to Carson, when he went up and asked for provisions, was, "bread is to eat, not to sell; take what you want." The general asked a Pimo who made the house I had seen. "It is the Cara de Montezuma,"

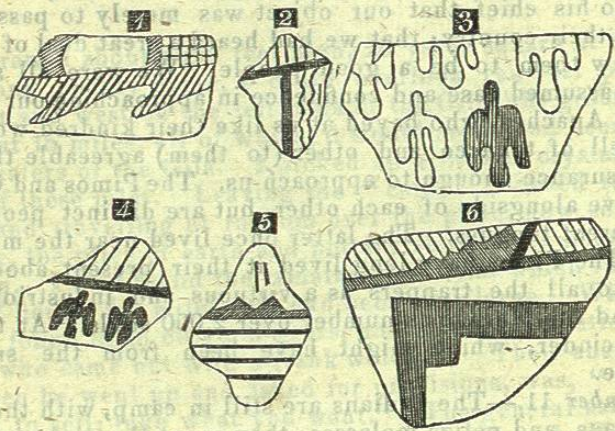
said he; "it was built by the son of the most beautiful woman who once dwelt in yon mountain; she was fair, and all the handsome men came to court her, but in vain; when they came, they paid tribute, and out of this small store, she fed all people in times of famine, and it did not diminish; at last, as she lay asleep, a drop of rain fell upon her navel, and she became pregnant, and brought forth a boy, who was the builder of all these houses." He seemed unwilling to talk about them, but said there were plenty more of them to the north, southwest, &c. He said when he first knew this cara, it was in better preservation, but that it had been burnt too long ago for any of them to remember. I showed him the hieroglyphic, but he did not understand it. Some other Pimos and



Coco Maricopas arrived, and messengers were sent to their village to buy watermelons and provisions, which soon came, although it was several miles. They wanted white beads for what they had to sell, and knew the value of money. Seeing us eating, the interpreter told the general he had tasted the liquor of Sonora and New Mexico, and would like to taste a sample of that of the United States. The dog had a liquorish tooth, and when given a drink of French brandy, pronounced it better than any he had ever seen or tasted. The Maricopa messenger came to ask the general what his business was, and where he was going. He said his people were at peace with all the world, except some of their neighbors, the Apaches; and they did not desire any more enemies. He was, of course, told to say to his chief that our object was merely to pass peaceably through their country; that we had heard a great deal of the Pimos, and knew them to be a good people. We were all struck with their unassuming ease and confidence in approaching our camp—not like the Apaches, who bayed at us like their kindred wolves, until the smell of tobacco and other (to them) agreeable things, gave them assurance enough to approach us. The Pimos and Coco Maricopas live alongside of each other, but are distinct people, speaking different tongues. The latter once lived near the mouth of the Gila. The Pimos have long lived at their present abode, and are known to all the trappers as a virtuous and industrious people. They and the Maricopas number over 2,000 souls. At the river, I saw a cinder, which might have been from the smelting of some ore.

November 11.—The Indians are still in camp, with their melons, corn, beans, and petiza molasses; they spent the night in our camp,

by the camp fires, without sleeping—talking and laughing incessantly. The interpreter of the Maricopas told Mr. Emory this morning that he could take him to a house north of the Gila larger than that we saw yesterday; being invited to go, I went, and found no house, but a mound 50 yards by 30, about 6 feet high, with loose basaltic rocks covering it; four slopes on top was loose stones, dirt, and pottery; around this, on the east side, a sort of low terrace, 100 yards on that side and 20 yards wide, terminated by loose stones, some of them set on edge. The mound ranged with the points of the compass; and, from the top of it, the whole adjacent country could be seen. In the vicinity, northwest, was a broad hole, surrounded by a mound similar in size and appearance to the well of yesterday, evidently once excavated, and filled up again. In the ruins, the guide said, ornamental stones, in vessels, were sometimes found after a rain; these the Pimos prize as ornaments, but cut them smaller. I found a small sea-shell, perforated, which had been worn as an ornament; other relics were picked up by Lieutenant Emory's party. The guide and other Indians informed me that on Salt river the ruins of these houses are more extensive; that an old secia is there yet plain to be seen many miles in length, and in every direction there are houses, some of them still standing lofty. This account has been given by various trappers, one of whom reports the old secia 30 miles in length. We returned towards the village, and found the camp in some of their corn-fields, which are separated by fences, and are all cultivated by irrigation, apparently with care; the cotton was still standing in some of the patches, but the frost had killed everything. The general had a talk with Ivan Antonio, the chief, and was welcomed by him; the people soon filled our camp, trading went on, and we got provisions enough, but only one beef and no mules; two thin mules being disdained for one fat one. The Indians, although they were crowding about our tents, and every thing was exposed to them, made no effort to steal anything.



Pottery found at the run.

November 12.—Awoke this morning to hear the crowing of the cock and the baying of the watch-dog, reminding me of civilization afar off in the green valley of our country; we waited until 9 before starting; left some mules with the chief, Don Antonio, whose Indian name is Banbutt, and marched down through the settlements of the Pimos and Coco Maricopas, which are all south of the Gila, and encamped beyond them, (distance 15 miles,) under the base of a mountain lying west of the villages. The houses of



these Indians are all built alike: a rib work of poles 12 or 15 feet in diameter is put up, thatched with straw, and then covered on top with dirt, in the centre of this they build their fires; this is the winter lodge: they make sheds with forks, and cover them with flat roofs of willow rods for summer shelters. The heat is no doubt very intense here in summer, so that at midday one could scarce venture out on the soil barefoot. The Indians exhibit no symptoms of taciturnity; but, on the contrary, give vent to their thoughts and feelings without reason, laughing and chatting together; and a parcel of young girls, with long hair streaming to their waists, and no other covering than a clean white cotton blanket folded around their middle and extending to their knees, were merry as any group of like age and sex to be met with in our own country. The Pimos and Coco Maricopas have only recently got together. The fable of the Pimos is, that their first parent was caught up to heaven, and from that time God lost sight of them, and they wandered to the west; that they came from the rising sun; the others found themselves on the Colorado, and have since gradually got here by following the Gila. They are evidently a different race, speak entirely different tongues, but have adopted the same costume, and apparently the same habits; their houses are alike, and they unite in good principles. The chief of the Pimos said to the general that God had placed him over his people, and he endeavored to do the best for them; he gave them good advice, and they had fathers and grandfathers who gave them good advice also; they were told to take nothing but what belonged to them, and to ever speak the truth; they desired to be at peace with every one; therefore would not join us or the Mexicans in our difficulties. He shook hands with and bid us welcome, and hoped we might have good luck on our journey. He said we would find the chief of the Maricopas a man like himself, and one who gave similar counsel to his people. On our road, the interpreter of the Maricopas said the flat land we could see across the Gila, towards the mountains, through which debouch the Salt and San Francisco rivers, is filled with ancient ruins, and that some of the houses are still standing; that their people know nothing of the builders of them. Our route lay through the plain, overgrown, when it was not cultivated, with Frémontia or mesquite, &c. A string of cotton-woods border the river, and throughout the country there are no other trees. The road was dusty and dry; our camp in an extensive pasture, reaching for miles under the mountains. The vast number of people who once lived in this country, as shown by the

ruins, proves that, by irrigation, it might sustain a numerous people; but its resources will not be called into play by our people until thousands of acres of unoccupied land has been taken up elsewhere, unless this should get a value as a highway between the two oceans—a thing no doubt perfectly favorable, if a man of capital and energy should undertake to open a route between Galveston and China. The long hair of the men of the Pimos and Coco Maricopas is remarkable, reaching to their waists; they put it up in twist, and coil it over their heads at times, at others it hangs down the back; it is cut straight across the forehead in men and women, and protects their eyes from the sun. The men and women both have long hair, but the men the longest; they sometimes put it up as a turban, with mud; it grows very thick.

November 13.—Laid in camp until 12, preparatory to taking the journey of 40 miles without water. The second chief of the Coco Maricopas visited the general, the first being lame; he said we had seen his people, that they did not steal; they were probably better than some the general had seen; all his people had sold us provisions, it was good to do so, as people should exchange when they had articles to trade; but if we had come here hungry and poor, it would have been his pleasure to give us all we wanted without compensation. Afterwards the first chief came in, and offered like expressions of friendship and peace. For want of an interpreter, an old woman with a fine countenance was taken; she had half a watermelon in her arms, and was naked, except a cloth from her waist to her knees—a state of nudity which would seem inconsistent with modesty, but here she proved that modesty is independent of refined taste, for she took upon herself the office of interpreter, and performed it reluctantly, but with a very becoming modesty of manner. After making the chief a small present, we prepared to start, bringing our animals up and watering them at a well which we had dug, some of them drinking three pails full of water, as if in anticipation of a long reach without it; we started at 12 to cross the Tesotal, or forty miles without water or grass. Our route lay to the south of the mountains, below the Pimos, on the south side of the river Gila; for the first two miles we had a grass plain of salt grass, the ground in places crusted with salt and occasional pools of water. As we rose the slope of the higher ground we found the gravel of a disintegrated granite, but no granite in sight, which was our footing for many miles, bushes and pitahaya growing upon it, but no grass. After progressing four or five miles, the eye turned back, took in at a glance the vast plain, the mountains on the San Francisco, the Salt river, and the mountains towards Tucson, limiting, except in a few gaps, the southeast, where it was bounded by the horizon. This plain had once been the home of a mighty people, whose existence is ever a fable to the present dwellers on the soil. We continued our march west, and laid by at dark, and tied our animals fast to the stink-wood bushes, for there was no grass; here we rested until 3 o'clock in the morning.

November 14.—When we saddled by the light of the moon and set out, the air was very chilly until sunrise; we passed a gap in the mountains, and emerged about sunrise upon another vast plain lying towards the Gila, with a mountain at some distance on either side; the sun produced wonderful effects with mirage; at the distance of the limits of the horizon, domes, walls, palisades, steeples, houses, and lakes were exhibited to us. About 10 o'clock we came to the river, and found our animals more anxious for grass than water, some of them did not drink. Along this stretch there is no growth but bushes and cactus, even a bait of grass could scarce be found, although there were places where grass had tried to grow, and failed for want of rain. If a contrivance for producing rain is ever put to test, necessity will invert it here; the idea is not absurd of making a rain—I have done it. After stopping at the river for a while to water, we marched down about four and a half or five miles and encamped on good grass half a mile from the river, the distance $44\frac{1}{2}$ miles, the road firm and plainly marked, evidently very old. Near where we struck the river is the sign of an Indian village, but it is evidently recent, probably one of the stopping places of the Coco Maricopas on their progress up the river; they were here in 1827, when Dr. Anderson passed to California, and furnished him with guides. The camp we left 15 miles below the Pimos, Dr. Anderson calls the Salineta; the end of the Jornada he calls Tesotal. The mountains here, as elsewhere in this country, stand off in scattered peaks, scarcely taking any ranges; some peaks to the northwest of us are apparently very high.

November 15.—It rained on us quite briskly last night—the second rain since we left Santa Fé; the storm-cloud made its appearance in the northwest, on the mountains; the wind southeast; so it is probable the mass of the rain lay to the north of us. We may find it to have watered the desert on the north side of the Colorado; lay by all day, to give our animals a chance to recruit a little; killed a beef in the evening; we have two left, not being very successful in buying them from the Pimos; instead of eight, we got four; they were unwilling to sell them for anything but beads. I forgot to ask the Pimos for numerals beyond 10; but, as I have never yet seen a tribe (I have seen hundreds) which did not make use of decimals, compounding all higher numbers from 10, as we do; whether this refers to the first invention, or to the natural digits, I know not.

November 16.—Marched at half past 8, and continued down the river, the road being still an Indian trail, old and well beaten, through the alluvial bottom of the river, which, instead of being a black loam, moist with water, is here, as we have found it all along, still a bed of dry dust off the road, burrowed in every direction by field-mice, making it uncomfortable for man or beast to leave the beaten track; the country thinly covered, as usual, with mesquite bushes, stink-wood, &c., and the bare places—three-fourths of the land—destitute of all vegetation. We passed about nine miles out, a little grass in a dry slough; and 12 miles out, we found enough of coarse grass to halt to noon upon; about two miles from

the river, a little below this, we crossed a rocky ridge composed of limestone, capped and cut up with igneous rocks, and altered in its nature in places, showing that portions of it had once been rendered into quick lime, and now changed again into a substance resembling old mortar; this ridge had peaks upon it of various kinds of volcanic rock, and west of it, the upper plain had been covered with a black seam of basalt for many miles. Above this, on the north side of the river, there is a mountain peak of volcanic rock standing between two peaks formed by the beds of igneous rocks which it has split asunder and upheaved, as it rose from the great internal reservoir of heat. The road was lined with the remains of



ancient houses, the broken stones and pottery being the only indications for nine miles. I followed this line of houses. In many places, quantities of sea shells, broken, were to be seen; and I found two or three shells which had been changed in shape, for some purpose of ornament. Of the pottery, a few pieces, only, were



colored. After crossing the ridge, we came to a small hill of volcanic rocks, upon which the Indians had marked, in a rude manner, a vast number of hieroglyphics. The place is frequented still by Indians, as their marks were still visible, and places where they appear to have ground corn, or made medicine. A few miles further brought us to the river, where we found no grass, but plenty of cane along the border of the stream. The country we have passed over to-day affords no pasture, but a great quantity of land capable of producing by irrigation. It never rains here in summer time. Query—why? Our camp is opposite to a blue basaltic peak, with nothing but an occasional tuft of something like grass upon it, and that in streaks down its sides, as if the seed had followed the streams of rain, as they flowed to the level. Distance, 20½ miles.

November 17.—Marched at 8, and continued down the left bank; our first two miles through a deep sand, the former bed of the river; very bad travelling; we crossed a small dry dusty bottom, and came to a creek, in the bed of which we found a good deal of grass; we halted to graze the animals a few minutes, and then ascended the basaltic beach about 50 feet high, and did not see the river for seven or eight miles. Here, again, on the alluvial bottom, we found some tufts of grass, where we nooned it for half an hour, and

then came to camp, about, distance, 18 miles, with a good deal of hunting along the river, the brush being quite thick. We got a camp on both sides of the river, with a very small allowance of grass and cane. We weather out, however, and remain till morning; to get this camp, we had to leave the trail. The course of the river here appears to be west southwest. On the right bank of the river, this evening, there appears to be a very extensive alluvial plain, reaching for miles from the river. No evidence of former habitation was seen. There were on some of the volcanic rocks which we passed, some marks like those of yesterday. About mid-day, we saw some old trail roads leading south. A deer was killed by one of the servants, and Carson caught a beaver; a hare crossed our path; a few little birds; the ravens, as usual, and a number of flocks of geese and ducks were all the animate objects we saw; the land might produce grapes and grain, but the people of this region will not be ever able to keep cattle unless rains are produced, for there is literally no pasture; a scanty camp may now and then be found. If we were supplied with boats, we could easily float to the mouth of the river. There is no timber here, however, out of which a canoe could be dug. Our road was rocky and rough to-day in many places.

November 18.—Marched at a quarter past 8, and passed close to a rock of basalt, upon which various Americans had scratched their initials and names. This point Carson called "Independence Rock." Here there had been a little grass, which had been grazed off. We travelled 16 miles, and found a good nooning place in a slough, which we left for the rear, and came on over the table-land for 10 miles, and encamped on the left bank of the river, at a scanty camp in a slough, containing pools of water saturated with salt. Distance, 20 miles west southwest. The belt of table-land here, from mountain to mountain, is about 15 miles, with plains running up between the peaks. This table-land is composed of small pebbles of all the rocks I have seen on the Gila, very much rounded by attrition. These are cemented by carbonate of lime into a concrete about as hard as what would be made by common mortar. The peaks on both sides of the river are very rugged, particularly on the north, one of them looking like a large city on a hill three or four miles below our camp. On the plain near the Gila, is a black pyramid of basalt, standing isolated, and about 300 feet high. On



the high plain, we found little tufts of grass under the bunches of *Fremontii*; the country almost bare, and only an occasional mesquite tree, and no tree on the mountain. On the plains of the river this morning, saw some sign of former habitation, but very little; two of our mules were abandoned to-day.

November 19, (Thursday).—Awoke at day-dawn, as usual, and found ice half an inch thick, and the air very cold. We climb the table-bench again 30 feet, and travel until we gradually get into the bottom of the Gila again, at the point of Bighorn mountain, where Carson shot a doe of the Bighorn or mountain sheep. This animal had the face of the sheep, but with very short hair all over; its horns were like those of the common wether; its color in the face, like the face of a dun cow; back and sides reddish grey, and the buttocks white—the white running down with a distinct line of demarcation to the hocks. The animal probably weighed 70 pounds; it had a very short tail, about two and a half inches; the foot very like a sheep; several of the males showed themselves on the cliffs, up which they climbed with great facility; their horns were very large, and their appearance much different from the female; it is said their horns sometimes weigh more than their bodies. The mountain upon which they disappeared is a coarse amygdaloid of granite and sienite, the current of which was a sort of granite, probably the debritus. West of this point, there were strata of dark-colored slate, alternately with sandstone and coarse granite amygdaloid, (their strata and their laminal;) the fields very much broken; at one point dipping south; a hundred yards further, dipping west, and again vertical; the mountain range was narrow, and ran off southeast; and beyond, in that direction, it appeared to change in character. The diluvion was the same as yesterday, except that west of the Bighorn, it had more sand, which, in places, had drifted into heaps. Distance, 19½ miles, west southwest. Encamped on abundance of coarse grass, in what recently had been the bed of the river, the channel being now a few hundred yards north; the bottom of the river abounded in places incrustated with salt, and grown with a vegetable with round pulpy leaf, peculiar to the salt plains. The same has been the case since we lost sight of former habitations, rendering it probable that this land will not produce by cultivation. Off the salt plains, the vegetation was very much the same as above, but a little thinner; no timber on mountain or hill; in fact, Bighorn did not support a shrub; the cotton-wood on the border of the Gila, being the only apology for trees, and none of them very large. In 1771, a Franciscan friar (Padre Garcéz) describes the Gila as fringed with plenty of young cotton-woods, so that he could hardly see the river. We passed a little cane in a slough east of the point of the Bighorn, enough for a dozen animals or so; which is the only place where any thing could halt for a single night, except this. Several of our animals fell far to the rear in coming to camp, and the only one of our beef cattle left was not to be found this morning. From this out, then, our food must be peas, beans, and corn, with mule-meat, if we should find it necessary to come to that.



November 20, (Friday).—The morning cool; ice formed in our vessels; Captain Moore reports that one of his sick men had fallen to the rear; orders were given to start one hour later than usual; the man came up in the night; marched at a quarter past 9, and

ascended the diluvial bench, which we found very sandy; and off to our left, in the southeast, we could see a very long sand-heap, laying near the van of Bighorn mountain; the plain reached to the south and northwest, to the limits of the horizon, in places; in others, intercepted by mountain peaks, which stood upon the surface, as if built, although fantastic in shape, steep, and rugged; the road was loose, and hard upon the animals—the pebbles and sand. We got into the bottom of the river about six miles out, where we found the travelling very bad, on account of the dry dust and brush. Encamped about three quarters of a mile from the river, opposite a number of salt lakes, which were very miry; our animals, several of them, got in, and one tired mule did not get out. The difficulty of finding the river kept the men late in the night before they got through with getting water to cook with; these salt lakes would not suit. Ducks and geese abounded. Distance, 16 miles. About six miles out, where we descended the diluvion, we passed a mountain of greyish basalt, and some evidence of displaced strata of coarse slate and amygdaloid at the base. We are approaching the Colorado, and hope to find it within 40 miles. Our animals begin to show the effects of the hard service, and many of them no doubt are destined to leave their bones to bleach on the desert west of the Colorado.

November 21, (Saturday).—Marched at the usual hour, our animals looking bad, from the effects of cold and the salt water which they drank. After marching seven miles, we came to the river, and watered. Along it, at this point, opposite to a four-turretted point of the mountain, on the north side, there appears to be all along the river a fair prospect for a camp; three miles further, and we came to a bottom in which we found a fine camp for this country. Grass enough for a halt, and the general determined to lay by for the day. The thickets on the Gila here are very difficult to get through at first, but the brush being *Frémontii*, and mostly dead, is not hard to break away. The cotton-woods on the river are on an average one foot in diameter, and 25 or 30 feet high. The road was bad to-day, impeded with loose stones of a sort of species changing to mica slate. The mountains to our southwest are composed of a loose-grained granite, which is so friable that it forms grottos, or oven-shaped cavities in its sides, the roof of which has



the form, in many cases, of the regular arch, which, in fact, would suggest that improvement in architecture, if it had not already been discovered. The granite is composed of a superabundance of quartz and mica.

November 22, (Sunday).—Marched at the usual hour, and continued down the Gila. On the left bank, the first eight or nine miles,