ments of San Pedro River for 5 days. No reason appears why settlements may not have extended as far north in 1539 as the journals of the Bernal expedition show that they did in 1697; namely, to within a few miles of the San Pedro’s junction with the Gila. But Castañeda’s observation, that the Indians of the Chichilticallí district "are the most barbarous people that have yet been seen. They live in separate cabins and not in settlements. They live by hunting", indicates that at the time of Coronado’s expedition the Sobaipuris did not come so far north as the Pueblo Valley, and that valley was occupied by the Apaches. It is even possible that the Chiricahua Mountain range and the long valley that flanks it were also then, as later, frequented by these same roaming Apaches.

In 1762, the author of the Rudo Ensayo wrote that the "Sierra del Chiguicagui" (Chiricahui or Chiricahuas) of which he said the name and dialect were of the Opata language and signified Turkey Mountains, was the great "Rochela" (retreat) of the Apaches. (According to the Bureau of American Ethnology's recently published Handbook of American Indians, the name Chiricahua is Apache, and means "great mountain.") In 1697, Lieut. Bernal’s military expedition found chief Coro’s band of Sobaipuris, in their village of Quiburi, on the San Pedro River, engaged in a dance around thirteen Apache scalps; which latter may reasonably be supposed to have been obtained from the borderland between the upper San Pedro Valley and the Chiricahua Mountains to the eastward.

The most northerly of the San Pedro River settlements reached by him in that year must have been in the neighborhood of Turkey River, since he descended the river only to some 10 leagues (37½ miles) below where now is the Rancho Cananea. Thus it seems probable that Miss, in 1530, left the San Pedro River some 3 or 4 miles above — that is, southeasterly of Cananea.

Jaramillo brings Coronado’s men to their point of turning eastward from the Nexpa, in but 2 days’ march down that river from the northern branch of the Gila River. This is, in an earlier part of this Paper, discussion of the ordinary and conventional day’s journey in the Spanish Southwest.
limit of the first despeblado; which, at 7 leagues a day, (his probable approximate rate over this evenly descending part of the road,) would be in the vicinity of Charleston. Hodge even supposes that "in two days ... they could have reached the latitude of Tombstone in Arizona, for traveling is comparatively easy up [down] San Pedro Valley, and the distance is less than forty-five miles in a straight line," which would be at a rate of about 8 leagues a day.

On the other hand, the Relación del Suceso makes the road to Cibola change from northward to northeastward much farther north; to wit, at latitude 34° 40'.

The discrepancy between these two original authorities, has been discussed by Hodge, who has arrived at the conclusion that Coronado turn eastward from the San Pedro in the vicinity of Benson, as follows:

In connection with Jaramillo's statement that two days down Nexpa River brought them to this turning-point, Hodge observes that "we cannot rely on Jaramillo's estimates of the time occupied between the points named by him, since he does not have full confidence in them himself"; and, quoting that author's description of the route down Nexpa River and to the river "de las Balsas," he emphasizes the following four expressions of doubt employed in it: "it seems to me"; "I believe"; "it is so long since we went there that I may be wrong in some days." He also notes that of the 15 days that Castañeda's Relación says it took to reach Rio Bermejol from Chichilticalli, Castañeda accounts for but 11.*

*Castañeda erred, however, in making the time between Chichilticalli and Rio Bermejol 18 days, instead of 13; 15 was both the usual time and Coronado's, between Chichilticalli and the first village of Cibola.

The remainder of Hodge's discussion of this turning-point, is as follows:

"In view of Jaramillo's confession of doubt, therefore, the advance guard may have reached [left] the San Pedro in the latitude of Tombstone, or they may have turned to the right from that stream considerably farther north. Tombstone, at any rate, is evidently the most southerly point from which the turn toward the northeast can be reckoned. Now, by determining the most northerly point at which the course of the army may have been diverted, we may be able to obtain a mean locality on which a conclusion may be based.

"From the Relación del Suceso (p. 573) it is learned that from the
Valley of Culiaca to Cibola. It is 240 leagues in two directions. It is north to about '34° 30', and from there to Cibola, which is nearly the 37°, toward the northeast. These general directions are, of course, only approximate. Many early travelers frequently say 'north' for 'northerly', and in this sense must we regard the direction given by the Relación referred to. A due north journey would have kept the army in the cordillera the entire distance; besides, Jaramillo states that the course from Culiaca was northwesterly, 'with some twisting.'

"Now to assume, in advance of the testimony, that Cibola was the site of seven villages occupied by the ancestors of the present Zuñi Indians of Western New Mexico, and an assumption that will be duly substantiated, we find that the Relacion del Suceso estimated the latitude about two degrees too far north, since Zuñi is in only about 35°. This would approximately determine the northernmost point on the San Pedro or Nexpa at which Coronado could have turned northeastward, or 'toward the right,' at about 32° 30' instead of 34° 30'.

But unfortunately, we cannot be sure that the error in reckoning the latitude of the two points given was the same in both instances, and 'about' and 'nearly' may mean a difference of thirty minutes, which, to an army grown accustomed to a march covering hundreds of leagues, would, after all, have been trivial.

"We have now determined the northernmost and the southernmost points at which the army could have turned eastward. The mean of these two places us in the neighborhood of Benson, on the Southern Pacific Railroad, east of which is Dragoon Pass, through which that railroad winds its course. There are other passes through the range of mountains that here extends from northwest to southeast, but the most prominent is the Dragoon Pass, which divides the range into two sections — the 'Galiuro' and the Dragoon Mountains.

"From the middle San Pedro the Dragoon Pass is the natural highway toward the northeast."
As regards the evidence from Jaramillo's narrative, versus that from the Relacion del Suceso, it seems to the present writer that Mr. Hodge's statement as to the unreliability of Jaramillo's estimates (confessed so repeatedly by Jaramillo himself) as to the number of days taken for different stretches of Coronado's march to Cibola, is of particular force in connection with so easy and monotonous a stage of that march as that down San Pedro River Valley, and in connection with such parts of Jaramillo's narrative as conflict with direct statements in other contemporaneous chronicles of that march. It would seem more logical, therefore, instead of averaging the data from Jaramillo and the Relacion del Suceso as to the place of leaving San Pedro River, to reject Jaramillo's in toto, and to assume that the two

*We have seen that Coronado's march from the native town of Corazones to Chichiliticalli averaged 5 3/4 leagues a day. Along his way the Rio Sonora was up-grade, and the incessantly winding path was impeded by many fords and sand-hills. In the river gorges it crossed rough and rocky ground and was crowded upon by rank growths of semitropical vegetation. The marching rate up the Sonora, therefore, probably fell considerably below that average.

From the Sonora-San Pedro divide to the Chichiliticalli district, 5 3/4 leagues a day, the rate must have been much slower; and probably not more than 4 leagues a day, Coronado would have covered the distance from Arispe to Chichiliticalli (about 77 leagues) in 13 days.

But Coronado's march from Arispe to Chichiliticalli, according to Jaramillo's narrative, was made up as follows:

<table>
<thead>
<tr>
<th>Distance</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Across the First Despoblado to the head of San Pedro River</td>
<td>4 days</td>
</tr>
<tr>
<td>Down the San Pedro River</td>
<td>2 days</td>
</tr>
<tr>
<td>To western foot of mountains east of San Pedro River, (To Querebisa Springs)</td>
<td>2 days</td>
</tr>
</tbody>
</table>

From western foot of those mountains to the "deep and reedy river" [Gila; late maps show, must have taken 2 days. Making altogether not more than 16 1/2 days. Hence there is a shortage of 3 days in Jaramillo's account of the time it took Coronado to march from Arispe to Chichiliticalli; and this shortage seems to have applied to that part of the march that led down the San Pedro River, we conclude that here Jaramillo's recollection failed him and that Coronado marched down that river 5 days, instead of 2.
latitudes given in the Relación del Suceso for the turning thence toward the northeast, and for the Rio de Cabo, are both to be accepted as the best that were obtainable by the means of determination then used, and that the latitude 34° 30', for the former, should, as an approximation, be reduced to modern reading by the same correction as has been found necessary in the case of Cibola-Zúñi (Hawikú-Granada), namely, a little more than 2 degrees. This would put the turning-point of the Coronado or 1540 expedition short of 32° 30' further east than the Prospect Creek Trail by which, as we have shown in Early Var West Paper, No. 1, Fray Marcos left San Pedro Valley in 1536, and since the errors of observation for Hawikú and for the point of leaving San Pedro River were probably nearly but not precisely the same, is consistent with the otherwise reasonable assumption, that Fray Marcos, guiding the expedition of 1540 over the same route and thoroughfare that they themselves had traveled the year before.

To the present writer, therefore, the evidence seems to support the conclusion that the Prospect Creek Pass (rather than either Nugent's or the Dragoon, though these are better known by reason of their use in recent decades for east-west travel by stage-coach and railway train) was that by which Coronado left the San Pedro Valley; and that a place near Pool is much more nearly than one near Benson, the point where Coronado's road to Cibola turned northeastward, or "toward the right," and "left the stream."

Footnote:
=""""The general and his force crossed the country without trouble, as they found everything peaceful, because the Indians honored Fray Marcos and some of the others who had been with Malchior Diaz when he went with Juan de Saldívar to investigate." (Castañeda, Winship's Translation, Bu. 3rd. Ann. XIV, 492.)"
Leaving the river here and bearing to the right, the only "mountain chain" whose "foot" the advance army could have reached "in two days' journey," is that which, from north-northwest to south-southeast, is divided into the sierras Santa Teresa, Pinaleno, and Chiricahua,—

by Eagle Pass between the first and second of those ranges and by Railroad Pass between the second and the third. Through this chain there are several passes; but only one of them will need be mentioned in connection with our present study.

Railroad Pass, as we have elsewhere observed, Mr. Hodge identifies with the Pass of 'Chichiltic Calli,' to which Jaramillo refers, "Bu. Eth. Ann. XIV, 584.

because it was at the western base of the mountains that news of the 'Red House' was heard." This name, "Chichiltic Calli," Jaramillo tells us, was adopted by the Spaniards for this pass "because we learned that this was what it was called, from some Indians whom we left behind." By those from the southwest whose road led through it to the Casa Colorado, it would naturally have been called the Pass of Chichilticalli.

The "great stealing road of the Apaches," described in Captain A. R. Johnston's Journal, of 1846, "and which led from the San Pedro River to the north by way of the vicinity of present Sahona," and which might at first be supposed to have led over the same course as that which Coronado followed from the middle San Pedro to Chichilticalli and Cibola, is said to have gone "around the southeast base" of "a high mountain," that had "the top covered with trees," and was "about five miles off" to the "south of southwest" of General Kearney's camp of October 23, 1853; the mountain thus described being that named "Mt. Graham" on the map of General Kearney's route, and more commonly known as the Cook now as Graham Peak. A road running along the south edge of the mountains, which is called the North Fork of the San Pedro, is apparently the "Cook Creek" described by the traders and miners, and is the route by which the earliest pioneers entered these mountains. The river is said to have been named after an Indian chief who lived on the upper San Pedro River.

Footnote: See next footnote; also Early Far West Paper, No. 3.

Footnote: "Journals of Henry and Johnston, Ex. No. 41, 30th Cong., 1st Sess.; especially p. 658 (Johnston and Say)." Docter Northrop, "The timber on Graham Peak is highly marketable. Pines ponderosa (the yellow pine of the region) cover thousands of acres, and attain a height of 80 feet, constituting a most valuable timber; Abies concolor, ponderosa pine; A. lincolniana, 70 feet; and A. engelmanni, 40 feet." The first two are of great importance as a source of timber. Under the present demand for timber, it is not at all probable that the supply will be exhausted for many years. The oaks so common on the lower hills of the Sierra Blanca are not so abundant, and do not range higher on Graham Peak than 6,000 feet. Between the oak and pinyon stands the mastic (Arctostaphylos glutinosa) grows rather abundantly. In some portions of the country the red berries of this shrub are utilized by the natives in making an acid drink. The northern or Dila slope of Graham Peak has a barren aspect, the timber apparently not reaching so low an altitude as on the southern. He adds that this condition "may be only apparent," and "due to the more rapid falling away of the land toward the river, Bunch-grass (Festuca and Poa) grows luxuriantly among the timber on the dry hills from 7,000 to 8,000 feet." (Wheeler Survey Report for 1878, p. 123.)

Graham Peak was
To the southeast of the ski area of Graham Peak from that camp, goes around the southeastern skirt of Graham Peak from that camp, threads, as it approaches the vicinity of Fort Grant, a pass which in recent decades has been known as Stockton Pass. But it is very probable that the southeastern base of Mount Graham was regarded by Captain Johnston in 1846, as by Doctor Bell in 1867-9, as being at the southeast limit of the Pinaleno Range, and that an important branch—perhaps the main one—of the Captain's "great steering road of the Apaches" went through Railroad Pass; for, of a reconnaissance in this region in 1867, Doctor Bell wrote as follows:

"There could be no doubt of the presence of Indians all through these mountains; for if we had not had so melancholy a proof of that fact at Fort Bowie, we had passed no less than four well-worn Indian trails, which crossed different parts of Railroad Pass, from one part of the range to the other. This was, in fact, the highway leading from the Sierra Blanca and other mountain fastnesses north of the Gila, to the State of Sonora, where those none of plunder were wont to make constant raids upon the helpless Mexicans."

Volume cited, pp. 57-58.

But while the "stealing road" through Railroad Pass and thence northward to the Gila and northwestward down the Pueblo Valley, was part of a one-time route from Sonora to the White Mountain Wilderness.

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by Lieutenant Emory, James Duncan Graham, Topographical Engineers, U. S. A., who was the leader of the General Kearney's Expedition to California. He was born in Prince William County, Virginia, April 4, 1799, and was a graduate of the Military Academy at West Point, of the class of 1817. He was appointed 3rd Lieutenant Corps Artillery, July 17, 1817; 2nd Lieut., Sept. 8, 1819. Was transferred to 4th Artillery June 1, 1821; to 3rd Artill., Aug. 16, 1821. Appointed Brevet Major Topographical Engineers Sept. 14, 1834; Major Topographical Engineers, July 7, 1838; Lieutenant-Colonel, Aug. 6, 1861. Transferred to Engineers Mar. 3, 1863; Colonel June 1, 1863. For valuable and highly distinguished service, A. M. was made Major Brevet Lieutenant-Colonel, Jan. 1, 1847. He was connected with the earlier part of the work of the United States and Mexican Boundary Commission (October, 1850, to October, 1851), in the capacity of Chief Astronomer, and Head of the Topographical Scientific Corps, had in part the survey of the northeast boundary of the United States, and represented the United States in determining the boundary between the United States and the British provinces, etc.