

jamin Franklin, who suggested that he write a history of electricity and to whom he dedicated his "Description of a Chart of History," and because the later years of his life were spent in Pennsylvania.

CHARLES K. WEAD

THE ZIA MESA AND RUINS

IN Mr. Edgar L. Hewett's "Antiquities of the Jemez Plateau, New Mexico," page 45, the description of village No. 41 reads:

On a partially isolated bit of mesa about three miles west of Jemez is a considerable ruin, which does not bear evidence, however, of long occupancy. The summit of the mesa is without trees and almost without soil, and water must have been obtained from below. The walls of the ruin are well defined, and stand in place five or six feet in height; but they are formed of rough, loosely laid stones, and are extremely thin and unstable. They could not have been high at any time, as there is a marked absence of débris, and the dearth of pottery and kitchen refuse would seem to stamp the place as a temporary or emergency abode. The site is favorable for defense, and there are traces of defensive walls along the margin and the summit. The buildings are irregular in plan and comprise three groups, the full length of the groups being about 450 feet and width 350. . . . There appears to be no definite historic reference to this site.¹

I wish to call attention to the last sentence quoted:

The archives at Santa Fé state that when Diego de Vargas Zapata Lujan Ponce de Leon, governor of El Paso and the Northern Province, made his first entrada northward in 1692 he found that the Zias and Santa Annas together had built a new village on Mesa Colorado (Red Mesa) and the Jemez, Santo Domingo and a few Apaches were fortified on the other mesa at the forks of the river. The Zias readily submitted but the Jemez were hostile. Their place submitted finally, October 26, 1692.²

Also when bringing the hostile pueblos under

¹ Smithsonian Institution, Bureau of American Ethnology, Bulletin 32, pp. 45-6. Also see "Notes on the Jemez Valley, New Mexico," by W. H. Holmes, *American Anthropologist*, Vol. I., No. 2, April-June, 1905.

² Also see Bancroft's "History," the volume on New Mexico and Arizona.

subjugation, Governor Vargas with 120 men joined the Queres under Chief Ojeda in an attack on the Jemez on July 21, 1694. While en route the Zia Mesa (Mesa Colorado) was captured, five men being killed. Then on July 24 they took the Jemez mesa-pueblo, called Mesa Don Diego. The fight here was one of the fiercest fought, the Queres did much in securing the place. Here Don Eusebio de Vargas, brother of the governor, distinguished himself. The Jemez lost 81 killed, 371 prisoners, the village was sacked and burned, 300 *fanegas* of corn were captured. The Jemez governor, Chief Diego, was surrendered, first condemned to be shot, but finally sent as a slave to the mines of Nueva Vizcaya; the Indians surrendered him, it is stated, saying that he had been the cause of the trouble. The prisoners, in part, were allowed to go back to Jemez and build on the old site in the valley, if they would promise to aid in the wars when needed. Their wives and children were kept as hostages till after the capture of San Ildefonso, which was then still holding out against the Spanish authority.³

The village on Mesa Colorado referred to in the archives is undoubtedly the ruin No. 41, mentioned by Mr. Hewett and also by Mr. Holmes. The writer has often visited the mesa and village in question. The rocks of the mesa are almost blood red in color, so red that even the walls of the writer's office in the Jemez village three miles distant were caused to have a reddish glow from the reflected sunlight in the early morning hours. There is no other mesa in the vicinity on which a village-ruin is situated, except the one at the forks of the river on which the old Jemez village was located. Furthermore, the Jemez people call the Red Mesa the Zia Mesa to-day; and the Zias themselves say that their people once lived on it. The ruin on it, I reassert, is undoubtedly the Zia pueblo on Mesa Colorado mentioned in the Spanish records.

Note.—In all the archeological notes on the Jemez region there seems to be no mention of the remains of an ancient reservoir back of the white buttes at the mouth of a canyada that comes down from the foothills and enters the valley-flat adjacent to the Zia Mesa. This reservoir doubtless supplied the village with water for drinking purposes at times.

³ "Archives, New Mexico," 158-162.

Also no reference seems to be made of the ancient irrigating ditch that now skirts the bluffs east of the Jemez River, some twenty-five feet above the present ditch. Also no mention has ever been made of the petroglyphs on "red rock" in the valley about a mile north of the present village of Jemez. Here are drawings of deer, lightnings, snakes, the sun and moon, Montezuma and the footprints of "the great road-runner."

ALBERT B. REAGAN

NETT LAKE SCHOOL,
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MAP OF MASSACHUSETTS WANTED

TO THE EDITOR OF SCIENCE: The U. S. Geological Survey published in 1889 a four sheet map of Massachusetts and Rhode Island, scale $\frac{1}{250000}$ contour interval 100 feet, forming a sheet 48×30 inches, and engraved by Julius Bien. Any person possessing a copy of this map and willing to loan the same for a short time would confer a great favor by communicating with the subscriber.

B. K. EMERSON

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THE BERKELEY ASTRONOMICAL DEPARTMENT

TO THE EDITOR OF SCIENCE: It has recently come to the attention of the Berkeley astronomical department of the University of California that Dr. See's reference to it (p. 479 of the issue of SCIENCE of Oct. 8, 1909) has created an erroneous impression concerning the connection of the department with his recent theories of cosmogony. This note is to point out that the Berkeley astronomical department has, in no way, either approved or disapproved them. Its attitude has been entirely neutral, as is evidenced by several newspaper interviews, in which it has always been definitely stated that the department would be in no position either to affirm or to refute any of Dr. See's theories until the completed work becomes available. This completed work has not yet appeared.

It is to be added that from June, 1908 until August, 1909, Professor Leuschner, director

of the students' observatory of this department, was abroad on leave and that the writer, as acting director, is entirely responsible for all matters emanating from here during that interval.

R. T. CRAWFORD

BERKELEY ASTRONOMICAL DEPARTMENT,
UNIVERSITY OF CALIFORNIA,
November 6, 1909

SCIENTIFIC BOOKS

Foundations of American Grape Culture. By T. V. MUNSON, D.Sc. Denison, Texas, T. V. Munson & Son. 1909.

The colossal work of Dr. Hedrick and associates of the Geneva (N. Y.) Agricultural Experiment Station (already reviewed in SCIENCE)¹ has been of inestimable service in furnishing a ready means of identification of grape varieties under cultivation, by means of superb colored illustrations and detailed descriptive matter. That volume is mainly devoted to results of tests and observations at the station on a very wide range of cultivated varieties, and does not assume to discuss botanical relations or the subject of interbreeding, except as standards of reference.

Those who have for many years watched the determined, painstaking labors of Dr. Munson, in Texas, have anticipated pleasure and profit from the monument he was expected to erect in the form of a book recording the outcome of his patient work and great sacrifices to compass the production of advanced types of grapes in the arduous process of breeding for quality.

"Foundations of American Grape Culture" comes as a veritable boon to many who owe its author much for previous aid and encouragement in the tedious and unremunerative practise of grape breeding. It is so filled with meat, so well and compactly arranged and thoroughly indexed, so copiously illustrated with most excellent reproductions from life, and so thoroughly digested, that it is impossible to characterize its contents in a sentence. The volume is remarkable in breadth of scope, completeness of treatment and wealth of detail, yet in clearness, conciseness

¹"The Grapes of New York."