

The name, Alaï, is applied to an extensive intermontane plain, and to the range enclosing it on the north. This plain and the similar elevated intermontane plains of the Pamir further south are spoken of as 'plateaus,' without explicit indication of structure, whether rock-floored or built of waste from the adjoining mountains, but the latter origin is implied. Lakes are said to be numerous, but they are briefly mentioned without sufficient indication of their associated features.

In a word, this series of articles forms a good example of the style of geographic descriptions in vogue to-day. It furnishes much general information as to the conditions of a region that has in recent years attained more political importance than its intrinsic value would give it; but the physiographic basis of the information is most elementary where it is not vague or wanting.

NOTES.

THOSE who attend the Geological Congress at St. Petersburg next summer will find an instructive summary of the movements of the earth's crust in Russia by Karpinsky (*Ann. de Géogr.*, v., 1896, 179-193). It is pointed out that the most tranquil area lies on the northwest, and that troughs of depression elsewhere show a notable sympathy in direction either with the Ural or the Caucasus mountains.

THE fertile subject of the physical subdivisions of the Alps is discussed anew by Haug (*Ibid.*, 167-178). He emphasizes the importance of synclinal basins, such as that of the Dolomites, as well as of anticlinal central *massifs*. An instructive map accompanies the essay.

FAIRCHILD describes several kame areas of pronounced form in western New York (*Chicago Journ. Geol.*, iv., 1896, 129-159) and a number of temporary glacial lakes and their southward overflow channels in

the region of the Genesee valley (*Bull. Geol. Soc. Amer.*, vii., 1896, 423-452).

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CURRENT NOTES ON ANTHROPOLOGY.

RUINS IN SOUTH AFRICA.

AN instructive article by Mr. R. M. W. Swan, in the *Journal of the Anthropological Institute* for August, gives further information about the ruined cities in the Zambesi country. They exist in great numbers throughout that territory, and are usually of small dimensions. The principal edifice is of rough stone, and is carefully oriented to the quarters of the heavens. For this reason it is probable that they served some religious purpose, and some of them were 'symbols of reverence erected by solar and phallic worshippers.'

They can no longer be attributed to the Phenicians. "Both in their plans and masonry, they are quite unlike anything that we know of that is Phenician." All the evidence indicates that their builders came for gold, and many specimens of that metal have been found in the ruins. A number of the sites are, however, in regions which are not auriferous. This Mr. Swan explains by the supposition that the attraction was the search for gems, which are found in moderate abundance. He does not attempt to identify the builders, but inclines to the belief that they will be shown to have come from southern Arabia.

ANTIQUITIES OF COSTA RICA.

THE National Museum of Costa Rica has commenced the publication of a series of articles descriptive of the antiquities of that republic. The first number (pp. 37) is by Señor Anastasio Alfaro, the competent director. It is illustrated and divided into three chapters, the first general, the second on the gold work of the Guetares Indians, the third on arms and ornaments in stone.

The Guetares were a tribe of moderately high culture in the interior. One of their cemeteries was excavated by Mr. Alfaro, and a large amount of material obtained. They were skilful in dressing stone, and one of their tables (or seats?) pictured in the report is remarkable for symmetry and finish. It is forty centimeters high and seventy-one in diameter. As goldsmiths they were not equal to the tribes near the Chiriqui lagoon, and decidedly inferior to those of Colombia, the Chibchas and Quimbayas. Their pottery, a number of specimens of which are figured, was superior in design and technique. It was of curious forms, and often ornamented with figures in polychrome.

The affiliations of the Guetares are still uncertain, as, except a few proper names, we have no specimen of their language, and they are apparently extinct.

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ASTRONOMICAL NOTES.

The Astronomical Journal of October 6th contains the announcement by Dr. See of his re-discovery of the companion of Sirius at the Lowell observatory. The other astronomers of the observatory have also seen and measured the companion. Dr. See says that, according to these measures, the companion has fallen no less than 30 degrees behind its predicted place in position angle. We suspect that this statement may be due to a misprint or a slip of the pen.

WE have received Vol. IV. of the publications of the Kuffner observatory in Vienna. It contains zone observations between 6° and 10° south declination, together with mean positions derived from them. There are also descriptions, by Messrs. Repsold, of the new prime vertical instrument of the observatory, which is provided with a vertical circle, and of the new heliometer.

Dr. S. Oppenheim contributes to the volume a paper on special periodic solutions in the problem of three bodies, and Dr. de Ball has an investigation of the orbit of Comet 1882 III. H. J.

SCIENTIFIC NOTES AND NEWS.

A SCIENTIFIC session of the National Academy of Sciences will be held in New York, at Columbia University, beginning November 17th, 1896, at 11 o'clock a. m. Members who have papers for this meeting may send the titles to Dr. C. F. Chandler, Columbia University, New York City. A special stated session of the Academy is called for Wednesday, November 18th, in New York, to consider the President's Annual Report to Congress, and other business that may come before the Academy.

THE Honolulu correspondent of the United Associated Presses writes that Mr. C. R. Bishop has authorized the trustees of the Bishop Museum to expend \$750,000 in building an aquarium and marine biological station at Honolulu, for the scientific study of marine life in the Pacific. Prof. W. T. Brigham has just returned from visiting European aquariums and is prepared to complete the plans. A body of professors and investigators will be maintained, and students will doubtless be attracted from Europe and America.

MAJOR J. W. POWELL and Mr. Frank Hamilton Cushing have recently completed a season's archæologic work on the coast of Maine. A number of interesting shell mounds were explored, and their contents are now *en route* to Washington for installation in the National Museum. In addition to the artifacts exhumed from the shell mounds, the collectors were able to obtain, through the aid of the Passamaquoddy or Abenaki Indians, an aboriginal birch-bark lodge, constructed by the natives in primitive fashion, native implements being chiefly employed in its construction.

DR. ALBERT S. GATSCHET, also of the Bureau of American Ethnology, has recently returned from an ethnologic trip through eastern Maine and contiguous parts of British territory. His scientific results include a rich collection of