

Lethaios, was discovered by M. Thenon, and afterwards transferred to the Louvre. Its meaning was deciphered by M. Bréal in 1878. In 1884, Halbherr, a pupil of Comparetti, discovered on the same site four columns, with additional parts of the inscription. A few months later eight more columns were disclosed by Fabricius. Dr. Halbherr returned again last summer to his task, but no additional inscriptions were found. The text thus gradually brought out is now printed with a translation, and with critical comments, by Professor Merriam, who comes to the conclusion that the inscription is probably of the period of Solon. Our space will not permit a fuller account of this wonderful monument, interesting not only to archeologists, but to students of historical law and the history of civilization. Professor Merriam is to continue his discussion in the following number of the journal.

S. Reinach, lately in the French school at Athens, describes a beautiful statue of Artemis, lately discovered, and now in the *Tchinley-Kiosk* museum in Constantinople. The editor, Dr. Frothingham, has an illustrated article on the revival of sculpture in Europe in the thirteenth century, and begins a series of notes on Christian mosaics. The other main article is by Mr. W. H. Holmes, on the monoliths of San Juan Teotihuacan, Mex. Our notice would be incomplete if it did not include a reference to a second article by Reinach on the base of an archaic bronze statue from Mount Ptous, which has an interesting and enigmatical inscription. Babelon's article, running through fifteen pages, on Greek and Roman numismatics, is also full of interest. But, valuable as are all these special papers, many readers will find still greater advantage in having at command, in a single number of this journal, forty-three pages of archeological news from all parts of the world, including fresh intelligence even from Cambodia and Hindustan.

#### GEOGRAPHICAL NOTES.

**Color-sense of the Fijians.** — Schwarzbach writes from Sydney in regard to the color-sense of the Fijians, which he has been investigating. They have no abstract word for color, but merely color-names. They have one name for black, which also includes all shades of blue, one for red and reddish tints, for white, for green, and for yellow. When asked to define more exactly some intermediate tint, they use some such phrase as 'it is like a bird.' Having examined over two thousand Hottentots, Malays, Melanesians, Australians, Maoris, and Polynesians for color-blindness, not a single instance was found; and the writer

believes it to be confined to the white race, and a defect due to influences connected with civilized life.

**Some local dialects.** — Pinart states that the use of the Aino tongue on the Kurile Islands, already affected by the Aleut population brought there by the Russian fur company, has become practically extinct except on Iterup and Urup, the two principal islands. Since the cession of the group by Russia to Japan, the influx of Japanese has been such as to greatly dilute the already sparse population; and it is also said that on the island of Yesso the use of the Aino tongue is rapidly declining, while mixture of blood by marriage with the Japanese is on the increase. The same authority announces that in the midst of the mountains of the Sierra Tutotepec, in Mexico, especially at the village of Huehuetla, is a tribe known as the Tepehuas, or mountaineers, but who call themselves Ulmeca. These people, M. Pinart believes, speak a dialect essentially similar to the Totonak, and are probably the last remnant of the Olmek people referred to by early writers. There are about four thousand of them, and their manners and customs are peculiar in many respects.

**Slavery in Madagascar.** — In connection with a discussion of the condition of society in Madagascar, some interesting details have recently been made public in regard to slavery on that island. It appears that somewhat more than half of the population of four millions are in a state of servitude. Though the slave-trade has been prohibited, and the individuals brought from Mozambique for sale have been freed by royal edict, there is still in the outlying districts a surreptitious trade in slaves, supposed to amount to several thousand per annum. Of the people recognized as slaves there are two classes, — those of the Hova race, who have become so by the action of law, which prescribes slavery as a punishment for various misdemeanors and for bankruptcy; and the Andovos, who are prisoners of war taken in the conflicts between the Hovas and other indigenes. There are no plantations, and field-work as a regular labor is almost unknown. The free Hovas are not permitted to marry slaves; and, on the other hand, those of the slaves who have become so on account of debt, etc., are not permitted to marry among the Andovos, who are regarded by them as much their inferiors. Slavery with the Hovas takes mostly the patriarchal form. Apart from those employed as workmen or domestic servants, many are practically free, only being required to pay tribute, as of a fagot, for instance, on the Hova New-Year. Those who live with their masters eat at the same board, converse freely with them, and frequently use such terms

of address as would be literally appropriate only from children of the master of the house. Many have houses and farms of their own, giving a share of the crop to the master, who can, but rarely does, claim the whole of it. Slaves can use their earnings to buy their freedom if they can accumulate enough to do so, and they are frequently owners of other slaves. They generally make their own bargains for wages if they go out as porters or domestics, and reckon with their owner themselves. The condition of the slaves is much harder, however, among the Sakalavas, in the north-east part of the island, — a tribe hostile to the Hovas, and still pagans, by an alleged treaty with whom the French have acquired those 'rights' which they have for some years been vainly endeavoring to enforce upon the Hovas. With the latter, since their conversion to Christianity, a gradual and important amelioration has taken place in the matter of slave-holding, and the families of criminals are now no longer liable to be sold into a state of servitude.

#### ASTRONOMICAL NOTES.

**The zodiacal light.** — Professor Searle of Harvard college observatory, in a paper recently published, has continued his interesting investigations on the zodiacal light. This peculiar phenomenon is supposed to be due to finely divided matter of some kind illuminated either by direct sunlight or by the result of electrical or chemical action. This matter may be only a portion of the atmosphere or of some cosmical mass more or less homogeneous, but illumination is presumed to be confined within certain limits; and the difficult task of the observer has been to attempt to define these limits. As a result of the present inquiry, there would seem to be reason to think, that after allowing for atmospheric absorption, which probably affects the apparent position largely, the zodiacal light, as seen during the second half of the nineteenth century, has had a more northern latitude near the longitude  $180^\circ$  than near the longitude  $0^\circ$ . Furthermore, from a careful study of the distribution of the stars in the Durchmusterung, Professor Searle shows, that, "upon the meteoric theory of the zodiacal light, it is to be expected that a continuous zodiacal band should be present; but the question of its actual visibility is complicated by the slight maxima of stellar density which are situated along those parts of the ecliptic most readily accessible to observation from stations in the northern hemisphere." And finally, from an examination of the elements of the first 237 asteroids, it would seem that the belt of sky

occupied by the projections of their orbits presents certain peculiarities which correspond to those of the zodiacal light, and suggest the hypothesis that the light may be partly due to minute objects circulating in orbits like those of the smaller planets.

**U. S. naval observatory.** — Vol. xxix. of the publications of the Naval observatory, now in press, will contain, in addition to the regular series of astronomical and meteorological observations for 1882, a valuable appendix by Professor Hall on the orbit of Iapetus, the outer satellite of Saturn; an appendix by Professor Harkness on the flexure of transit instruments; and a third appendix by Commander A. D. Brown, giving the observations of the partial solar eclipse of 1885 March 16, made at the observatory, and also observations made by several volunteer parties near the line where the annular phase was visible.

**Lord Rosse's observatory, Birr castle.** — We have recently received two papers communicated by the Earl of Rosse to the Royal Dublin society, and reprinted from vol. iii. (second series) of the Scientific transactions of the society. The first of these papers is a series of notes by Dr. Boeddicker, on the aspect of the planet Mars in 1884, accompanied by a lithographed plate giving thirteen sketches of the markings on the planet's surface. The second paper is also by Dr. Boeddicker, and contains the results of observations made on the changes of heat from the moon during the total eclipse of 1884 Oct. 4. From these observations it would appear that the amount of heat radiated to us from the moon itself, as distinguished from that merely reflected or diffused by it, is almost insensible; and the minimum of the heat effect falls decidedly later than the minimum of illumination.

#### NOTES AND NEWS.

For many years the exorbitant tax on salt in India has oppressed the lower classes, almost extinguishing some branches of industry. The Indian government has at last become alive to certain objections to the present rates of the salt-tax; namely, that cattle are stinted of a supply of salt, and that the same duty is charged on salt employed in manufactures or agriculture as for that used for other purposes. Experiments, for some time unsuccessful, have been prosecuted with a view of discovering a process whereby salt, while still useful for manufactures and agriculture, could be rendered unfit for human consumption. The government has now offered a reward, not exceeding five thousand rupees, to the inventor of a process satisfying the following condi-