

at Philadelphia read (reduced to sea-level) 28.69; it was 30.81 in the anticyclonic centre near Lake Winnipeg, a difference of over two inches in only

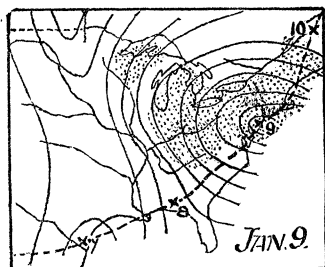


FIG. 3.

1,400 miles. This is illustrated in fig. 3, which gives the isobars for every even tenth of an inch; it shows also the area (dotted) over which snow was falling at this time; and the storm-track is traced by a heavy broken line, with a cross and a date to mark the place of the centre at seven o'clock in the morning while it lay within our territory. The numerous wrecks along our coast attest the violence of the winds at this time. When the monthly weather review for January comes out, we shall hope to find a detailed account of this storm, especially from those stations along the coast that lay close on the path of its centre.

Fig. 4, for the same date, is designed to illustrate the extraordinarily low temperatures brought by the cold wave in the rear of the cyclone. The

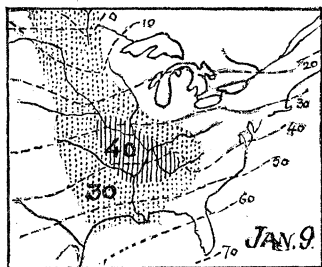


FIG. 4.

mean temperatures for January are taken from Lieutenant Greely's monograph (1881), and drawn in broken lines for every ten degrees. By comparing these with the six temperature maps above, the amount of departure from the normal may be estimated. The departure for Jan. 9 is given by two shaded areas, showing a depression of thirty and forty degrees respectively; this depression being calculated from the mean January temperature at 7 A.M., as given in the chief signal officer's

report for 1884. The temperatures reached in the southern states on this and the following days are in all cases close to the recorded minimum of earlier years, and in many cases are lower than any thing known in the signal-service stations there. Altogether, the storm and the cold wave are perfect examples of their unpleasant kind.

W. M. D.

AMERICAN JOURNAL OF ARCHEOLOGY.

THE fourth number of the *American journal of archeology*, which has just appeared in Baltimore, completes the first volume, and fully sustains the high expectations which were entertained of its management. Nearly five hundred pages, illustrated by eleven plates and sixteen figures, have been given to the subscribers; but the quality of the articles is more noteworthy than the quantity. No other archeological journal of any country affords so comprehensive a view of the progress of investigation and discussion. All important reviews and monographs and books are noticed by competent readers and critics, whose names are appended as authority for the statements which are presented. The proceedings of societies are also recorded. Although chiefly concerned with the archeology of civilized nations, prehistoric remains are not neglected; but the effort is made to represent in one journal all the varied movements of the science. The managing editor, A. L. Frothingham, jun., Ph.D., by his complete familiarity with the French, Italian, and German languages, and by his long residence in Rome, has become acquainted with the leading authorities, and has been able to secure their encouragement, and to a considerable extent their co-operation in his undertaking. A list of those Europeans who have already made, or who have promised at an early day to make, contributions to the *American journal of archeology*, includes the names of such well-known persons as Piper of Berlin; Reber of Munich; Michaelis of Strassburg; Schreiber of Leipzig; Ramsay of Oxford; Babelon, Reinach, Müntz, and de Marsy, of Paris; de Rossi, Marucchi, and Helbig, of Rome; Hildebrand of Stockholm; Lambros of Athens; and many more. Many of our countrymen are also enlisted in the enterprise.

With such an array of names, a good series of papers would of course be expected, and the result has been satisfactory. In the latest number the most noteworthy article is, perhaps, that of Professor Merriam, on that remarkable code recently discovered at Gortynia in Crete. So long ago as 1857, an inscribed stone, built into the walls of a mill on the banks of the Cretan river

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