

systematic order, the common weather types and the succeeding changes which occur over Europe. After finding in the book a weather map which represents exactly or nearly the same conditions as prevail on any particular day, one can form a judgment as to the kind of weather that will probably obtain on the next day or two, by noting what weather changes took place under similar conditions before. In the chapter on forecasts for some days in advance, Van Bebber defines five common and easily recognized weather types, dependent upon the distribution of atmospheric pressure over Europe. The weather conditions which distinguish these five types may last for various lengths of time, according to circumstances, but they may often be counted on for three days and a half. When, therefore, one of these types is recognized as occurring, a fairly reliable forecast for three days ahead can frequently be made.

THE CLIMATE OF CUBA.

BULLETIN No. 22 of the Weather Bureau, entitled *Climate of Cuba; also a Note on the Weather of Manila*, by W. F. R. Phillips, has evidently, as is stated in the pamphlet, 'been somewhat hastily prepared.' The Havana Observatory has given us most of what is definitely known about Cuban meteorology, in its series of annual volumes of observations. Apart from these, there are only fragmentary data. In the present bulletin reference is made to meteorological observations at Key West, Nassau, Port au Prince, San Juan, Porto Rico, and other neighboring places, in order to throw further light on the climatic conditions of Cuba. At Havana the mean annual temperature is 77° F., in round numbers. July has a mean of 82.4°; January has 70.3°. Santiago apparently has a higher mean annual temperature, viz., about 80°. From very fragmentary, and probably also rather

unreliable, records made at Ubajay and the San Fernando mines, in the interior, the mean annual temperature appears to be considerably lower there than on the coast. The relative humidity is fairly constant at Havana, the average being 75%. The mean annual rainfall at Havana is 51.73 inches (based on records for 30 years). The rainy season begins late in May or early in June, and ends in October. 68% of the annual rainfall comes during these months, but in 30 years it has happened five times that the rainfall in the so-called dry season has equalled or exceeded that of the rainy season. The northeast trades are the prevailing winds, but these are occasionally interfered with by cyclonic winds. In winter, *northers* are felt along the northern coast of Cuba, these being due to the passage of cyclonic centers over the southern portion of the United States.

A few paragraphs at the end of the report, concerning the *Weather of Manila*, were compiled by Professor H. A. Hazen. The data relate to the observations made at the Manila Observatory. The mean annual temperature at Manila is 80° F. May, the hottest month, has 84°, and December and January, the coldest months, have 77°. September has 85% of relative humidity, and April, 70%. The mean annual rainfall is 75.43 inches, of which 50.74 inches fall in June–October. It is to be regretted that this bulletin was not made more complete, as the information it gives, especially concerning Manila, is very fragmentary indeed.

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CURRENT NOTES ON ANTHROPOLOGY.

THE BUILDING SACRIFICE.

On all continents and in all ages when an important building is commenced or finished some kind of celebration takes place. Very generally it used to be a sacrifice, human, or of some lower animal. This

custom is the theme of a thorough study by Dr. Paul Sartori in the *Zeitschrift für Ethnologie*, Heft I., 1898.

Having demonstrated its wide extension he seeks for the psychical motives which prompt it. They are complex. Sometimes the offering was to the spirit of the place or to the gods for the undertaking; or it was to obtain a guardian divinity in the soul of the victim; or it was magical, by the spilling of blood to drive away evil spirits; or it was a procedure in sympathetic magic, the offering or victim being eaten with joy, so that joy should abide in the house; or the sacrifice was in some way vicarious, a substitute for what fate might otherwise demand of the house owner.

The article is a good example of exposition and analysis applied to a widespread rite.

THE CUSTOM OF 'DHARNA.'

THE legal practice in India of *Dharna*, or sitting at a debtor's door and not eating until the debt is paid, still obtains in that country and is as old as the laws of Manu. The debtor must either pay up or move away, or else the creditor will starve himself to death. This would seem to us a very silly proceeding on the part of the creditor; but Dr. S. R. Steinmetz, in a study of the custom printed in the *Rivista Sociologia Italiana* for January of this year, points out that when the meaning and origin of the usage are appreciated, it is by no means so foolish as it looks. Should the creditor die from hunger, the debtor is held responsible for murder, and the terrible penalties of blood revenge will be wreaked upon him by the family of the creditor. Not only the debtor himself, but all his kin or gens will become the targets of a merciless vendetta. With this certainty in view, any sacrifice on his part would be wiser than to allow the creditor to perish.

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SCIENTIFIC NOTES AND NEWS.

THE MEETING OF THE AMERICAN ASSOCIATION.

A PROPOSITION to invite the American Association for the Advancement of Science to meet in Philadelphia in 1899 was referred by the Council of the Academy of Natural Sciences for consideration to a committee consisting of Messrs. Samuel G. Dixon, Thomas Meehan, Rev. Henry C. McCook, William Powell Wilson, Henry Skinner and Edward J. Nolan. After consultation with representatives of other scientific institutions and educational interests at a well attended meeting held in the Academy on the 22d inst., the following was unanimously adopted:

As the first meeting of the American Association for the Advancement of Science was held in Philadelphia in 1848, and as it is fourteen years since the most successful meeting in its history was also held here,

Resolved, That this meeting, in the belief that the second half century of the Association's career should begin in the city of its birth, approve of the suggestion that an invitation to meet in Philadelphia in 1899 be conveyed to the session to be held in Boston next August.

After a statement by Dr. Nolan regarding the successful methods of the local committee in 1884, and remarks in support of the proposition from Dr. Daniel G. Brinton, those in attendance signed a form of invitation to be transmitted to the Association in time to be acted on by the Boston session, and the Secretary was directed to obtain the signatures of representatives of the municipal government and others endorsing the movement but unable to be present.

The brilliant success of the meeting of 1884, and the desirability of starting the Association on its second half century under the most favorable auspices, after what will undoubtedly be a largely attended session in Boston, are sufficient reasons for the movement thus inaugurated. It is especially fitting that the preliminary steps should have been taken by the Academy of Natural Sciences, not only because of the honorable position it has always maintained in the scientific world, but also because the first meeting in 1848 was held within its walls. If the invitation to meet next year in Philadelphia be