The work is rather an elaborate study of some well-known but badly recorded myths. The myths discovered among savage and barbaric peoples, and told by untrained anthropologists, have as little value for the science of anthropology as the stories told by unscientific travellers concerning wonderful animals have for zoölogy. In every Indian village of North America, civilized or uncivilized, the myths of the ancient days are yet told; and the science of North-American mythology cannot be given to the world until thousands of myths now current are collected by trained men. — J. W. P. [282

**Mortuary customs.** — Several curious survivals in different departments of France noted; among them, beehives put in mourning with black cloth, on the death of the proprietor, to prevent flight of the bees after the soul. — (*Bull. soc. anthrop. Paris*, April-July, 1882.) J. W. P. [283

**Cranial deformation.** — In the collection of crania by M. Marche, from the Philippine islands, a large proportion exhibited an occipito-frontal compression, described by M. Topinard to be nearly identical with the results of the cranial compression of the Peruvians and Chinooks. — (*Bull. soc. anthrop. Paris*, April-July, 1882.) J. W. P. [284

**Brain-weight tables from Cochin China.** — A contribution of M. Neïs is described by M. Topinard as the most important yet received regarding the cranial capacity of the 'yellow race,' showing a near approach to Europeans, and marked separation from negroes, in this respect. — (*Bull. soc. anthrop. Paris*, April-July, 1882.) J. W. P. [285

**The nur-aghes of Sardinia.** — Dr. d'Hercourt described the ancient stone-works, or nur-aghes, of Sardinia, and contended that the object of their construction was for places of refuge for man and beast against sudden attack, and also to serve as signal-stations. — (*Bull. soc. anthrop. Paris*, April-July, 1882.) J. W. P. [286

**Races in Cochin China.** — M. de Claubry presents the characteristics of the Malabars, Malays, Cambodians, Chinese, and Anamites, the last named being the most interesting. — (*Bull. soc. anthrop. Paris*, April-July, 1882.) J. W. P. [287

## *INTELLIGENCE FROM AMERICAN SCIENTIFIC STATIONS.*

### GOVERNMENT ORGANIZATIONS.

#### Bureau of weights and measures.

*Distribution of standards.* — Under the provisions of a joint resolution of the two houses of congress, approved March 3, 1881, there are now preparing in the Bureau of weights and measures, at Washington, sets of customary English standards, for distribution to the governors of the various states, for the use of the agricultural colleges throughout the country. One set is to be sent to each state. In cases where there are two or more agricultural colleges in one state, the question of assignment is left with the governor. Each set consists of a yard-scale divided to tenths of inches; weights, twenty-six in number, ranging from twenty-five pounds to one grain; liquid measures from a gallon to a pint; and dry measures from a half-bushel to a quart. These are closely adjusted to the standards, and with each set will be sent a table of the very small residual errors shown to exist by the final comparisons. The adjustment of these weights and measures is now so nearly completed that notifications have been sent to the governors of most of the states, and the distribution will begin in a few weeks. These standards will serve an important use in educating students to ideas of accuracy in this most important matter. The general government has already supplied to each of the states, for use as state standards, full sets of English weights and measures, and also balances. Upon the passage in July, 1866, of the act legalizing the metric system in the United States, the general government also furnished to each state complete sets of metric weights and measures. These sets are kept at the respective seats of government, and are available for the verification of the standards used by the county or town sealers of weights and measures. Being all carefully adjusted to a common standard, their use will procure practical uniformity in weights and measures throughout the country.

#### Geological survey.

*Topographical work.* — Congress having authorized the extension of the work of the geological survey into the older states, topographical work, preparatory to geological study, was commenced in the southern Appalachian region shortly after the adjournment of congress last August. A division, consisting of one party for carrying on triangulation, and three for topography, was organized at Bristol, Tenn. Triangulation was extended north-west-ward from the Coast Survey belt along the Blue Ridge, the line 'Benn Knob to Poore's Knob,' as determined by the Coast and geodetic survey, serving as a base. About 5,000 □ miles only were surveyed, as the season for field-work was short, and the weather very unpropitious. The area surveyed includes portions of the high mountain region of east Tennessee, western North Carolina, south-western Virginia, and eastern Kentucky.

For the purpose of testing thoroughly the practical value of Mr. G. K. Gilbert's method of reducing barometric observations, four barometric stations were established about and on the summit of Roan Mt., N.C., at elevations ranging from 2,000 to 6,300 feet, and connected with one another by level lines.

Besides the work of this division, geographic work was carried on in northern California, looking towards mapping the Cascade range, with a view of studying its volcanic phenomena.

Another geographic division continued the work in western New Mexico, commenced the previous year; while a fourth division commenced work in southern Montana, near Bozeman.

Besides these four divisions engaged upon general geographic work, a number of parties were engaged upon special and more detailed surveys. Among these surveys may be mentioned that of the quicksilver mining-districts of California, of the Silver cliff and other mining-districts of Colorado, and the surveys for tracing out the shore-lines of the fossil lakes of western Nevada and Oregon.

#### National museum.

*Telegraphic announcement of the stranding of large marine animals.* — A short time ago the men at the different life-saving stations along the entire coast were instructed by Supt. Kimball to telegraph to Washington the stranding of any large marine ani-

mal, immediately upon its occurrence. The first fruit of this excellent system, in the form of a highly interesting shark, arrived at the Smithsonian Institution on the 14th inst., from Amagansett, Long Island. To indicate the importance which this new departure seems likely at once to assume, it may be stated that this first specimen, having been examined by Dr. T. H. Bean, curator of the department of fishes, proves to be a species of Pseudotriacis, a genus of which no representative has been hitherto recorded as occurring in the western Atlantic. The species, P. microdon, to which the Amagansett shark belongs, was made known in 1867, by Capello, from the coast of Portugal.

Bureau of Ethnology.

*Cliff dwellings in the Cañon de Chilly.* — The ethnologic and archeologic researches that were begun a few years ago in the north-west were continued during the present season in that region known as the San Juan, principally in the cañons formed by the drainage of that river and its tributaries. The examinations of ruins were conducted in Cañon de Chilly and some of its principal side cañons, by Col. James Stevenson; and some important and interesting discoveries and collections were made. About forty-five ruined villages and dwellings were visited, many of which were carefully explored. Several of the more important villages were surveyed, and careful measurements taken, from which to construct models. About one-fourth of the number of ruins observed in these cañons were situated so high up in the sides of the cliff walls as to be inaccessible. Those, however, from which the finest specimens were obtained, and which presented the most novel features of architecture, were reached. One village, in this connection, is worthy of special mention. It is located in a side cañon of the de Chilly, about twelve miles from its junction with the main valley. The ruins occupy a space of about 900 feet in length by an average width of 125 feet. It is located in a large cave-like opening, whose arch circles over the village to a height of about 200 feet. Some of the houses have tumbled completely down; others are in a partial state of preservation; and a few are so well preserved as to present the whole plan of architectural design, as well as all the details of the masonry. This dwelling showed, that, wherever implements were used in its construction, they were made of stone; and no evidence appeared that the inhabitants had any knowledge of metal. The implements were all either of bone, stone, or wood.

At intervals among the ruins stood the walls of four estufas, in a sufficient state of preservation to enable one to define very closely the character of the original structure. These were circular, but varied quite essentially from estufas of the present day. The interior of one of these has a wide band, laid on in bright, durable colors, running entirely around the structure, resembling a Greek fret, with narrow bands above and below, and with the interior spaces filled with curious artistic designs. The walls in the rear of the ruins are literally covered with picture-writing, and in every convenient spot may be seen small cup-like cavities produced by sharpening stone implements.

In front of the village was found a burial cist, or artificially constructed oven-shaped pen, in which were found the remains of four human skeletons. The manner and care manifested in the burial of these dead may be taken as a type of the burial-customs of the cliff-dwellers. This cist, or oven, was composed of small logs, stones, and plaster. The diameter of the urn at the bottom is about four feet, closing toward the top in the shape of a dome. The logs were laid one on the top of the other, earth thrown up around the outside, and the interior heavily coated with plaster. The skeletons were doubled up like mummies, though buried without being wrapped in cloth or clothing of any kind. These skeletons were secured, and brought to the National museum. Among the *débris* of these same ruins were found many objects of dress and clothing, several kinds of moccasons or sandals, showing fine workmanship and skill in weaving, and many other objects illustrative of the art, manners, and customs of the cliff-dwellers; a full account of which will appear in Major Powell's official report from the bureau.

## PUBLIC AND PRIVATE INSTITUTIONS.

Harvard college observatory.

*Transmission of astronomical intelligence.* — An association of about fifty European observatories has recently been formed for this purpose, with its headquarters at the Royal observatory, Kiel, Germany, directed by Prof. Krueger, who has taken charge of the business of the association. Connections by cable have been established with South America, South Africa, and Australia; and the observatory has been requested to co-operate with it, in the United States, by receiving and distributing in this country the telegraphic information sent from Kiel, and by forwarding to Kiel by telegraph any similiar information of importance collected from American astronomers. By the courtesy of Prof. Baird, secretary of the Smithsonian institution, the function hitherto performed by the institution, of collecting and transmitting announcements of discovery, has been transferred to the Harvard college observatory.

The importance of the work thus begun requires that a special officer of the observatory should be intrusted with it. Mr. John Ritchie, jun., has accordingly been appointed assistant in charge of this service, and the details of the proposed system are explained by him in a circular, which may be had on application.

American astronomers are requested to send to the "Harvard college observatory, Cambridge, Massachusetts," telegraphic information of discoveries of comets, asteroids, or phenomena of any kind requiring immediate attention. Arrangements will be made to refund the cost of such telegrams to the senders when their contents are of importance. It is very desirable that the messages should conform to the principles stated in Mr. Ritchie's circular.

It is intended that the distribution of information in this country shall be of such nature as to be productive of the greatest possible benefit, and will be of the broadest possible character. Discoveries, whether by American astronomers or by foreigners, will be circulated through the associated news companies, by special circulars of the Science observer, and by special telegrams.

## *NOTES AND NEWS.*

— The National academy of sciences at its last meeting appointed a committee, of which Prof. C. A. Young is chairman, and Prof. J. H. C. Coffin secretary, to arrange plans for observing the total eclipse of the sun of May 6 next. This eclipse is of unusual importance, as the duration of totality at its maximum value is 5 m. 55 sec. Unfortunately, the path of the shadow lies wholly in the Pacific Ocean, and