

not be driven by clockwork if the time of the appearance of the brightest meteors in the region towards which the camera is directed is noted. For then the exact positions of the comparison stars in their curved trails while the plate is exposed is known. Amateur assistance in meteor photography is, therefore, valuable. Of still greater value is the photographic record by the larger instruments. Not only can the paths of the meteors be located with accuracy and the position of the radiant points determined, but special characteristics of the trails may be studied. Thus the Harvard Circular, No. 35, mentions that the light attained a maximum and then diminished as rapidly as it increased; that sudden changes due to explosions are well shown; that the trail is sometimes surrounded by a sheath of light, and that in one case the trail remained after the meteor had passed. That these characteristics, which have been noted visually heretofore, should now submit to a permanent photographic record shows that photography will have a large place in this branch of astronomical study.

## CHASE'S COMET (J. 1898).

THE discovery of this comet on the plates exposed at New Haven, on the radiant region of the Leonids, is the most interesting episode of the meteor observations. The photographic brightness was estimated to be equal to a star of the 11th magnitude, but it was much fainter in a visual telescope. It was hoped that it might be connected with the meteor stream, but its orbit shows that it simply chanced to be in that direction when observed. The preliminary orbits thus far published are unusually discordant, perhaps due to the combination of the photographic and visual determinations of position.

## STELLAR MOTIONS.

PROFESSOR W. W. CAMPBELL, of the Lick Observatory, in the publications of the Astronomical Society of the Pacific, announces the rapid movement towards us of two stars,  $\eta$  Cephei and  $\zeta$  Herculis. From four photographs of their spectra he determines a relative velocity of 53.9 miles per second for the former and 43.7 for the latter. Allowing for the motion of the solar system, these figures are reduced to 46.0 miles

per second and 33.5 miles per second respectively.

WINSLOW UPTON.

BROWN UNIVERSITY,  
December 16, 1898.

## CURRENT NOTES ON ANTHROPOLOGY.

## THE AMERICAN HERO-MYTH.

Two studies have lately appeared on the widely diffused myth of the 'culture-hero' in America. The one is by the Count de Charencey, on the legend of Huitzilopochtli, printed in the *Proceedings* of the French Association for the Advancement of Science, 1897; the other is by Dr. Franz Boas, reprinted from the *Memoirs* of the American Folk-lore Society, Vol. VI., and treats of the Salish Raven Myth and others from the Northwestern tribes.

All these myths are strikingly alike in many details, and both these writers agree that 'it is inconceivable that they originated independently.' Hence Dr. Boas claims that the various raven and coyote tales have a common source; and with precisely the same and equally strong arguments M. de Charencey shows that the myths of the Mayas and Nahuas originated in eastern Asia.

To my thinking, not the similarities (for these we should expect from the constitution of the human mind), but the differences in such myths are what should command our chief attention.

## THE PRIMITIVE SAVAGE.

'Was primitive man a modern savage?' is the question asked by Dr. Talcott Williams in the Smithsonian Report, just issued, and answered by him in a constructive negative. To Dr. Williams, primitive man was a peaceful, happy creature, knowing not war or cannibalism, with a 'surprising primitive development,' which later on degenerated into civilization. This early man enjoyed 'a juster conception of the divine' than his descendants. His gods were peaceful, communication free, hospitality open. "The earth was still empty and happy and young."

If Dr. Williams intends this as a pleasant, humorous sketch, it will pass; if a serious inference from the ascertained facts of prehistoric

investigation, its author is about a century behind time, as every student of the actual remains of earliest man knows the painful but irrefutable evidence of his worse than barbarous, his really brutal, condition, apart from all comparisons with modern savages.

#### A BOOKLET ON ETHNOLOGY.

DR. MICHAEL HABERLANDT is a 'Privatdozent' in the University of Vienna and also Curator of the Ethnographic Collection in the Royal Museum of that city. A few months ago there appeared from his pen a duodecimo treatise on Ethnography which offers much the best summary of the science which I have anywhere seen. Of its 200 pages half are devoted to general principles, those which belong to 'Ethnology;' and the remainder to descriptive ethnography. Both are characterized by thorough familiarity with the facts, and careful, independent reflection on them. The introduction discusses, with remarkable clearness, the principles of social degeneration and evolution.

Just such brief, clear, up-to-date books as this are what we need in anthropology in this country. It is better to write them than to translate them, and it is unfortunate that we still lack them. (*Völkerkunde*, G. F. Goschen, Leipzig. 1898.)

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#### SCIENTIFIC NOTES AND NEWS.

IN the present issue of *SCIENCE*—which opens a new volume—the short notes are placed at the end, in the part of the number which is the last to be printed. These notes should contain reliable, prompt and full information, and men of science in America and abroad are requested to contribute items of news whose publication will forward the objects of this JOURNAL.

THE Paris Academy of Sciences has awarded its Lalande prize to Dr. S. C. Chandler, of Cambridge, Mass., and the Damoiseau prize to Dr. George W. Hill, of Columbia University.

PROFESSOR G. W. FARLOW, of Harvard University, has been elected President of the American Society of Naturalists. Professor H. C. Bumpus, of Brown University, to whom the recent growth and successful meetings of the

Society have been in large measure due, has resigned the Secretaryship and is succeeded by Professor T. H. Morgan, of Bryn Mawr College.

PROFESSOR R. S. WOODWARD, of Columbia University, has been elected President of the American Mathematical Society in succession to Professor Simon Newcomb.

PROFESSOR JOHN DEWEY, of the University of Chicago, has been elected President of the American Psychological Association.

THE office of Mr. W. T. Hornaday, Director of the New York Zoological Park, has been moved from 69 Wall Street to the Park, Southern Boulevard and 183d Street, and communications should now be sent to this address. The offices are temporarily established in the Elk House, near the southwest corner of the Park.

THE Rev. Dr. Bartholomew Price, Master of Pembroke College, Oxford, and until last year Sedleian professor of natural philosophy, died on December 29th in his 81st year. He was the author of works on dynamics and on the calculus.

DR. JOHN B. HAMILTON, formerly Surgeon-General of the U. S. Marine Hospital Service, editor of the *Journal of the American Medical Association* and professor of surgery at the Rush Medical College, Chicago, died at Elgin, Ill., on December 24th.

DR. WILLIAM MUNK, the well-known London physician, died on December 20th, aged 73. He was formerly Librarian of the Harveian Library of the Royal College of Physicians and author of the Roll of the College and other works, both of a biographical character and on medical subjects.

THE New York Section of the American Chemical Society was able to receive the Society at its recent New York meeting in the Chemists' Club, newly established in the building at 108 West 55th Street. The club-house contains a large assembly room for meetings, smaller rooms and accommodation for the library, which it is expected will be deposited there. The President of the Club is Professor Charles F. Chandler, of Columbia University.

THE Royal Institution, London, was founded