which the actual rotation took place. This suggests a precaution—during the spin, hold the head down so that it is rotated about its long axis; on coming out of the spin, raise the head. Any disturbance experienced then will be in directional (*i. e.,* horizontal) stability, and the more dangerous falling reaction will be avoided.

The superior reliability of visual criteria of attitude should be recognized. "Follow the horizon, if it ties itself up in a knot," is a good rule to remember.

A very illuminating incident that occurred at Mineola when the writer was stationed there, first suggested this analysis of the rôle the rotary vertigo may play in the tail-spin. On June 29, 1918, a pilot, while flying in a formation, lost his balance and fell off into a tail-spin. He got out of the spin, but fell off into another spin *in the opposite direction.* And he got out of the second spin also, but only to fall into a third, *again reversing.* He crashed and was seriously injured.

The pilot in question was acquainted with the tail-spin, but had never done one "solo" before. It immediately occurred to the writer that the accident was a case of overcontrol due to a falling reaction and the precaution under (2) suggested itself. At the same time it was recalled that Lieutenant Simon,[2] instructor in acrobatics at the school at Pau, France, cautioned his pupils to hold the head down under the cowl during a spin. Evidently the French aviator had arrived empirically at the same rule that the writer had deduced from his acquaintance with a physiological phenomenon. No knowledge of the precaution has been met with among American trainers.

The observations were at the time (July, 1918) informally brought to the attention of several members of the staff of the Medical Research Laboratory at the field. Subsequent observations and experiences as a pilot in acrobatic flying have confirmed the conclusions.

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[2] Quoted from Nordhoff in the Atlantic Monthly for April, 1918.

THE GALTON SOCIETY FOR THE STUDY OF THE ORIGIN AND EVOLUTION OF MAN

THE objects of the society are the promotion of study of racial anthropology, and of the origin, migration, physical and mental characters, crossing and evolution of human races, living and extinct.

The charter members of the society are as follows: Madison Grant, Henry Fairfield Osborn, John C. Merriam, Edward L. Thorndike, William K. Gregory, Charles B. Davenport, George S. Huntington, J. Howard McGregor, Edwin G. Conklin.

The organization of the society was suggested and initiated by Messrs. Davenport and Grant on March 6, 1918. On April 2, after several previous conferences, Messrs. Davenport, Grant, Osborn and Huntington adopted the charter and the name of the society. The first meeting of the charter fellows was held in New York on April 7 at the residence of Professor Osborn, who outlined the object of the society and emphasized the importance of a union of effort on the part of specialists, working in close cooperation and harmony with one another but from widely diverse lines of approach. Professor C. B. Davenport was elected chairman and Dr. W. K. Gregory secretary. The following men were elected as fellows: Drs. Ernest A. Hooton, Peabody Museum; Gerrit Smith Miller, United States National Museum; Raymond Pearl, United States Food Administration; L. R. Sullivan, American Museum of National History; Frederick Tilney, New York; Professor Harris H. Wilder, Smith College; Dr. Clark Wissler, American Museum of Natural History. Two patrons were elected: Mrs. E. H. Harriman and Mr. M. Taylor Pyne, New York.

A meeting of the society was held in the Osborn Library at the American Museum of Natural History on May 14. At this meeting Professor McGregor demonstrated his reconstruction of the skull of a typical adult Crô-Magnon man, based on all known remains of the race.

Dr. Wissler sketched the rise of anthropology in Europe and America, and contrasted the two concepts of this study: the first as including all lines of investigation on the origin and evolution of human races and of their cultures, and the second as limiting anthropology to the study of physical characteristics. He said that the museum had tried to develop all branches of anthropology in the broader sense, and referred to the methods of exhibiting these lines which were to be illustrated by Mr. Sullivan's paper.

Mr. Sullivan, in giving an account of a museum exhibit of the races of the Philippine Islands, based on a critical examination of the literature, showed that at least three physical types are present there, characterized by differences in skin-color, hair, stature, head-form and form of nose; first, the negritos, long recognized as a distinct race, who are short in stature, with a very dark brown skin, wide open dark brown eyes, black kinky hair, short head and short wide nose; second, the Malayan tribes, tallest of the island groups, with skins of varying shades of brown, dark brown Mongoloid eyes, straight black hair, and relatively narrow nose; and third, a group which is often confused with the second but belongs to the Indonesian racial type. This type stands between the negritos and Malays in point of size, is less Mongoloid in appearance, has the longest head on the islands, and straight or wavy dark brown hair. Mr. Sullivan's paper was discussed by Professor Kroeber who outlined the successive cultural strata in the Philippines.

Professor Davenport, the chairman of the society, commented on the wide field for the labors of such an organization which was afforded by the presence in New York of representatives of many of the living races of Europe, Asia and Africa, and by the existence of various organizations which would gladly cooperate in the study of the races of Europe. He spoke of the vast material at hand for the study of human inheritance and hybridization.

The second regular meeting of the society was held at the American Museum of Natural History on December 6, 1918. The meeting was preceded by a luncheon at which the members present were the guests of Professor Osborn and Mr. Grant.

Mr. Grant presented to the society a portrait of Sir Francis Galton. Professor Merriam spoke of the place anthropology should hold in the universities. In order to make the discussion concrete, he gave a brief outline of the history of anthropology in the University of California. When the department was started everyone thought best to begin with the local anthropological problem, in other words, with the study of the California Indians. Under Professor Kroeber this work has been carried to a very satisfactory conclusion and while a great deal more work should be done it seems that a point had been reached where new problems should be undertaken. The speaker thought this was typical of anthropology in America. Everywhere the feeling had been and rightly, that attention should be given to the problems at hand. The result is that we have a very systematic body of knowledge concerning the North American Indians, but have no contributing workers in larger anthropological problems. The effect of the world war and its broadening influences makes it highly desirable that anthropology should be put upon a broader and more fundamental plane, particularly should it deal with problems concerning our racial and national antecedents. The broadening of anthropology would also require the drawing in and coordination of much that has been done in psychology, biology, neurology and history. It was the hope of the speaker that the Galton Society would be able to bring about such coordination by bringing together some of the representative workers in respective lines. One of the first movements in this direction should be the encouragement of strong departments in our universities. Unless the universities can be induced to finance strong departments of anthropology we can not expect very great development in the future. On the other hand, it was the belief of the speaker that the universities would finance such departments of anthropology if they could see that the problems of anthropology were of universal concern.

There was a brief discussion by Professor Huntington, Mr. Grant and Professor Osborn.

Professor Huntington spoke of the four fields in which the differential characteristics separating man from lower mammals were particularly conspicuous, marking the progress of human evolution. These four fields were: the organs of locomotion, the hands, the vocal and respiratory organs and the central nervous system. It is in these fields especially that characters diagnostic of the various races are to be sought.

W. K. Gregory,
Secretary

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