different layers, and in partly dried material one is often able to strip off several layers. Mueller's statement that the cuticular layers of Ascaris are "fairly similar" leads me to hope that his analysis may be regarded as in a general way confirming my own.

It is interesting to note that Ward states in his chapter on Parasitic Worms (Ward and Whipple, "Fresh Water Biology") in discussing the cuticula of nematodes that "it has been correctly designated as cornein by Reichard." Since no reference to my incorrect statement is made in this text book it may be inferred that Ward also was misled by the subtitles.

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AN UNUSUAL ATMOSPHERIC PHENOMENON

ON the morning of December 14 a rather unusual atmospheric phenomenon, the so-called circumzenithal arc, was observed at Brunswick, Me. It had the form of a bright rainbow-like arc about 90 degrees in extent with its center of curvature approximately at the zenith. The colors were much more clearly defined than in the ordinary rainbow, the red being at the outer edge of the arc and the violet at the inner. The arc extended in azimuth roughly from west to south. When the phenomenon first appeared the sun was at an altitude of some 20 degrees, and the edge of the arc at about 70 degrees. The arc remained visible for about half an hour. The weather at the time was clearing, and low lying fog clouds moving from north to south partially obscured the sun although blue sky was visible near the zenith. The surface temperature was slightly above freezing.

The phenomenon just described while rare is not unknown. It may be explained by the refraction of the sun's rays in passing through columnar snow crystals with tabular caps, the crystals acting as right prisms. A detailed explanation of the circumzenithal arc is given by Humphreys in "Physics of the Air," p. 511. The striking feature of this particular occurrence of it was its duration. As generally observed it has lasted only about five minutes, while in this instance it was distinctly visible for a full half hour.

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PSYCHO-ENDOCRINOLOGY

NEW words are sometimes as important events in history of science as new discoveries. For the word means the crystallization of a new concept. And the crystallization of a new concept means the attainment of one of the ideals of science: the correlation of the relationships of hitherto unrelated observations and findings. Such new concepts are valuable not only for classification of the activities of the worker in science in the past, but also for orientation towards the problems and methods of the future.

Accumulating information during the past fifty years has pointed to an importance of the endocrine glands for the problems of the science of psychology. Whether that science be looked upon as the study and control of consciousness or whether it be looked upon as the study and control of the behavior of an organism as a whole reacting to an environment makes no difference. From either viewpoint, evidence has accumulated that the endocrine glands, modifying conditions in the organism in general and in the nervous system in particular, are of the utmost significance for the data of psychology.

It is time I think an attempt was made to collect under the rubric of a single name the results of various individual investigations in the fields of psychology, biochemistry and medicine, where they will be collectively available to the research worker. I propose the word "psycho-endocrinology" as the name for that branch of science which deals with the relation of the endocrine glands to mental activities and processes, as well as to behavior, including the individual characteristics in health and disease, summarized in the term personality.

LOUIS BERMAN

QUOTATIONS

STATE ACADEMIES OF SCIENCE

THE American Association for the Advancement of Science has now in affiliation with it the academies of science of twenty-two states. As an organization this association and its affiliated organizations are not much given to talking of themselves. The report of the activities and progress of the state academies as told in an address of the president of the New Hampshire Academy and published in SCIENCE would indicate that they have a position of importance in creating an interest in scientific achievements and disseminating valuable scientific information. The name of the association might suggest an exclusive gathering of college professors and scientists. While it has in its own membership and that of the affiliated organizations men of learning and attainments in scientific research at the same time it has members who may never have spent an hour in a scientific laboratory, whose part in the organization is that of individuals of the ever-increasing number in this country who are interested in science and who find in one or more of its branches, as the report says, an avocation or a hobby distinct from their ordinary life routine.