slander and libel are considered synonymous, a whole column is devoted to explaining and illustrating the distinctions between them. Analogous words in this case are: detract from, decry, disparage, depreciate, derogate from, vituperate, revile, defile, pollute. The antonym is defend. Contrasted words: vindicate, justify, maintain, extol, eulogize, praise. Some of these words are cross-referenced to other articles where further information is presented.

The Dictionary is well up-to-date. Under the article on the word drunk, for example, one finds this comment: "There are many slang terms that imply intoxication: most of them, such as spiflicated (or spiflicated), soused, lit, and blotto, are strong in their implications, suggesting loss of powers of locomotion, recognition, speech, and the like."

An indication of the careful and scholarly way in which the various words are distinguished is the wealth of illustrative citations from English and American literature, ancient and modern. Under the word malign again, no less than eleven quotations are included to illustrate differentiations in meanings of the synonyms, the authors ranging from classical English writers—Shakespeare, Burke, Scott, Meredith, Tennyson-to such contemporary writers as John Buchan and Van Wyck Brooks. An impressive list of all the authors quoted (at least 1,000, with full names and dates) is appended. Another feature of the Dictionary is the introductory "Survey of the History of English Synonymy," an informative and fundamental chapter for any one interested in the science of words or who wants to know how this dictionary differs from its predecessors. Typographically, the book has been punctiliously put together, the result being an unusually clear and readable page. The main text is printed in 7-point monotype Binney on an 8-point body, double column.

Although precision may be the chief objective for any writer who treats of philosophical subjects, the scientist who tirelessly expands his vocabulary and becomes increasingly sensitive to the subtleties of language will find that perspicuity is not the only reward. He will find himself developing also a richness of style to enhance his expression. He will find that where he used to repeat the same word two or three times in a single sentence, there will spring to his mind half a dozen others to choose from. He will discover himself spending quarter-hours at a time searching for the right word. And when he has finished his sentence, his chapter, his book, he may truly realize what is meant by the old apothegm, "Easy reading, hard writing."

Besides which, for every writer, whether he be scientist, historian, novelist or poet, there is a peculiar artistic satisfaction in having said (if indeed he ever does) exactly what he set out to say. Every writer worth his salt has fallen in love with words, and he woos them ardently. This new Dictionary of Synonyms, whose publication seems to me a real event, should help to "marry off" many an elusive word to "her" new master.

PAUL H. OEHSER

U. S. NATIONAL MUSEUM

## **AUTONOMIC REGULATIONS**

Autonomic Regulations. Their Significance for Physiology, Psychology and Neuropsychiatry. By Ernst Gellhorn. New York: Interscience Publishers, Inc. 373 pp. 80 figs. 1942.

Interrelations of organ systems is attracting the attention of physiologists more and more as the knowledge of the nervous and endocrine systems increases. The study of the organism as a whole is the ultimate goal.

In the present work, "those organs which are influenced by the autonomic system and affect it in turn are subjected to a physiological analysis. Consequently, the relationship between hormones and the autonomic nervous system is investigated." The mutual relation between the autonomic and somatic nervous systems is discussed. It is shown that the autonomic system is afferent as well as efferent, influencing the excitability of the somatic system. An analysis of emergency conditions indicates that the vago-insulin system, as well as the sympathetic-adrenal system, is involved.

This book evolved as a result of lectures and research during the past nine years. The great amount accomplished by Gellhorn and his associates is indicated by the fact that three fourths of the figures are from his laboratory. However, the large number of references (1,100) shows that he has drawn freely on the work of other investigators.

Approximately the first third of the book is devoted to adjustment reactions involving primarily the respiratory and circulatory systems in response to carbon dioxide, anoxia, asphyxia, hemorrhage and hypoglycemia with a chapter on the regulation of cerebral circulation.

This is followed by discussions of the nervous regulation of the hypophysis and the role of the sympathetico-adrenal and vago-insulin systems.

The next part deals with autonomic-somatic integration. The role of the sympathetic and parasympathetic systems in anoxia, hypoglycemia and hemorrhage is covered in one chapter, while a second chapter deals with the differences in the reaction of the autonomic and somatic nervous systems and a third is SCIENCE

concerned with the relation between these two systems and its significance in convulsions. The fourth chapter of this part is on the autonomic basis of emotion.

The last part, on results and applications, begins with two very good chapters on the principles of autonomic organization and on organismic physiology. There is a chapter on anesthesia, and one headed "The

autonomic nervous system and neuropsychiatry," which is an attempt to analyze the effects of various procedures used in the treatment of schizophrenia. A good summary at the end of each chapter is helpful to the reader. The book is a distinct contribution to the literature.

FRANK A. HARTMAN

## REPORTS

## GENERAL COUNCIL ON ZOOLOGICAL NOMENCLATURE

The undersigned zoologists, resident in the United States of America, at the invitation of the Committee on Nomenclature of the American Society of Mammalogists and with the cooperation of the "American Commission on Scientific Nomenclature" of the Entomological Society of America, do hereby associate themselves together as a society and certify as follows:

First: The name of the society shall be the General Council on Zoological Nomenclature.

Second: The objects of the society shall be:

- (A) To act in an advisory capacity in all matters concerning zoological nomenclature during the World War and for such time thereafter as it may consider desirable.
- (B) To administer, amend, interpret, and maintain a code of nomenclature for the use of zoologists.
- (C) To cooperate with societies maintaining committees on nomenclature, at least those represented in its own membership.
- (D) To retain within itself important powers of decision and legislation and of substitutions and additions to its membership, but always subject to full hearings and the advice and counsel of one or more of the committees above mentioned.
- (E) To cooperate with zoologists practised in nomenclature who are residents of foreign countries when the war is ended or as soon thereafter as may be practicable.

G. F. FERRIS
WILFRED H. OSGOOD
JAMES A. G. REHN
GEORGE G. SIMPSON\*
JOHN T. ZIMMER

practicable.
Remington Kellogg
H. A. Pilsbry
Karl P. Schmidt
A. Wetmore

Merely on the face of it, the above may seem to be a self-constituted body of dubious possibilities and audacious construction. That this is not the case may be evident when its history and purposes are explained. It is the outgrowth of numerous informal discussions among a large number of zoologists dur-

\* Dr. Simpson's signature is assumed on the basis of his verbal agreement before he left for war service where he can not now be reached.

ing the past few years and of formal action taken by at least two national societies.

Even in years just prior to the war, the International Commission on Zoological Nomenclature was relatively inactive and after hostilities began in Europe in 1939 it became practically non-functional. This created a situation in which all cooperative action was endangered and nearly a century's hard-earned progress in nomenclature was threatened. Individuals and organizations began to discuss special codes for their separate groups only and in some cases took definite action. Recently a German (Poche) has promulgated a code of his own and in general at the moment every zoologist having a nomenclatural problem finds himself without appeal to any constituted authority. It was precisely to avoid this condition that codes and commissions were devised.

Discussion among zoologists unanimously recognized the emergency, but it was difficult to arrive at a basis for action which did not involve very great delay and long-drawn controversy. There were those who felt that the international idea could not be abandoned and others who advocated complete divorce from the Old World. The latter pointed to the success of the International Commission as being mainly due to the American, C. W. Stiles, whose final conclusion (see SCIENCE, 73: pp. 349–354, 1931) was that it was not further workable. Among those holding this opinion were several Europeans.

As announced in Science (June 12, 1942) the Entomological Society of America, pursuant to action taken at its meeting in December, 1941, formed an "American Commission on Scientific Nomenclature in Entomology" apparently with the object of proceeding independently. Somewhat later at its annual meeting in April, 1942, the American Society of Mammalogists instructed its standing committee on nomenclature "to act pro-tem in the present world crisis for the Committee [sic] on Nomenclature of the International Commission." The Mammalogists' committee felt that any committee restricted to a particular branch of zoology would be ineffective. Therefore, with the approval of the society's president and principal directors, this committee entered into correspondence with the entomologists proposing that the two committees, without further authorization, jointly