hand and told my fortune. I asked the color of my voice. He asked me to count to twenty and to say the alphabet. I did so. He looked thoughtful, pondered a moment, and said, "You will think it strange, perhaps—your voice is blue-violet—an intellectual voice."

It has seemed to me that the color hearing was, in the case of my mother and of the Hindu, virtually the same—dove-color and blue-violet—the elements of the colors being alike.

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A HISTORICAL NOTE ON SEX DETERMINATION IN PIGEONS

IN connection with papers on sex determination in pigeons, setting forth the observations of C. O. Whitman and O. Riddle, it is interesting to find that an old French book records a part of the tradition of bird-fanciers regarding the tendency of some eggs to develop into males.

Riddle has summarized the extensive researches of Whitman and of himself as follows: "In the pigeons the first egg is smaller and is a male, the second is larger and usually a female, while as the season advances the smaller ones also are female-producers."[1]

In the reprint collection of the U. S. Fisheries Laboratory at Woods Hole, Mass., the writer recently came upon a small booklet by Jules Gautier entitled "La Fécondation artificielle," Troisème edition, Paris, 1881, which has on page 21 the following footnote:

> Chose remarquable! c'est que les oiseaux qui n'ont que deux oeufs par couvée (pigeons, colombes) en produisent un pour chaque sexe. Le premier pondu est toujours affecté au mâle, et celui-ci éclôt ordinairement avant la femelle.

The shrewd observations of breeders of horses, cattle and dogs are also deserving of consideration in planning investigations on the physiological basis of sex determination, and have already been shown to be worth nearly as much as certain clinical records.

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ZOOLOGICAL NOMENCLATURE

NOMENCLATURE: Notice to the zoological profession that suspension of the rules has been asked in the case of *Spirifer* Sow, 1816, and *Syringothyris* Winchell, 1863.

In accordance with prescribed routine, the secretary of the International Commission of Zoological Nomenclature has the honor herewith to notify the members of the zoological profession that Miss Helen M. Muir Wood, of the British Museum of Natural History, has submitted the generic names *Spirifer* Sow, 1816, and *Syringothyris* Winchell, 1863, to the International Commission, for suspension of rules, with a view to retaining *Anomia striata* Martin as genotype of *Spirifer* and *Syringothyris typa* (s. *Spirifer carteri* Hall) as genotype of *Syringothyris*.

The argument is presented: (1) that under the rules *Anomia cuspidata* Martin is type of *Spirifer* and *Syringothyris* is synonym of *Spirifer;* (2) but for 70 years practically all authors have, in conscious opposition to the rules, taken *A. striata* as type of *Spirifer* and *Spirifer carteri* s. *Sy. typa* as type of *Syringothyris;* (3) so many species are involved in this instance that the application of the rules would present greater confusion than uniformity.

The secretary will postpone vote on this case for one year and invites expression of opinion for or against suspension in the premises.

C. W. STILES,
Secretary

HYGIENIC LABORATORY,
WASHINGTON, D. C.

QUOTATIONS

RECOGNITION OF SCIENTIFIC WORK

L. H. BAEKELAND, just returned from an extensive trip with renewed appreciation for the opportunities and privileges of the United States, recently brought to our attention the desirability of having Congress recognize in some specific and definite way the triumphs of our men of science, particularly those in department circles. Then in the editorial section of the *New York World* for September 2, Ellwood Hendrick discussed the same sentiments and made a plea for such recognition by Congress. We wish to add our voice and urge that something be done in a proper way to have our law-makers realize that "the United States is the only civilized country in the world that does not recognize distingiushed service by civilians. In the British Empire they make them lords or knights —and we can not do that. In France, Italy, Spain, Belgium, Portugal, China, Japan, and even in Soviet Russia, they give decorations. We do not give decorations to civilians. Moreover, the insignia of decorations have been preempted by so many private organizations in this country that a button in the lapel of a man's coat is without its significance elsewhere."

But there are other ways in which this Nation can express its thanks. Perhaps some day we may go as far as our neighbor Canada and grant a substantial annuity to a man who has made a scientific discovery of great importance to the public. There seems no

[1] Riddle, O., "The determination of sex and its experimental control," *Bull.* Am. Ac. Med., Vol. 15, No. 5, October, 1914.

reason why Congress could not pass an act, engrossed and signed by the President of the United States, consisting of a proper preamble and resolution commencing and expressing gratitude to a man who has devoted many years of his life, his ability as a scientist and perhaps as an inventor, to the welfare of the republic.

Such a document would be invaluable to the recipient. Moreover, the adoption of a policy of this kind might be the first step in working out a really adequate plan for rewarding scientists, many of whom have steadfastly refused more remunerative offers out of pure patriotism. Such action might be taken only upon the retirement of a departmental head or bureau chief, but those are details. The point we want to make now is that the devotion and sacrifice of our chemists to the science should be recognized in some way.—*Journal of Industrial and Engineering Chemistry.*

SCIENTIFIC BOOKS

The Psychic Life of Insects. By E. L. BOUVIER. Translated by L. O. HOWARD. New York. The Century Company, 1922.

THE behavior of the very lowest animals is determined largely by tropisms and reflexes, that is, inevitable physical responses to physico-chemical stimuli. The behavior of the very highest animals is chiefly determined by intelligence and reason. But the behavior of by far the largest number of animal kinds is mostly determined by instinct. Conspicuous and most abundant among these animals with the instinct kind of mind are the insects, constituting, as zoologists classify animals, only a single class in one of the several great animal phyla, but comprising perhaps three fourths of all the known species of animals. That means that there are approximately 400,000 different kinds of known insects. Guessing how many living kinds we do not yet know is a much pursued sport of entomologists.

Since the discovery of Fabre by the general public the psychic life of insects has been a favorite subject of reading, between new novels. Maeterlinck's "Life of the Bee" has helped to encourage this reading, while numerous other books about insect life written by men and women who know much about this life, but usually a little less about writing, are readily available to readers intent on continuing this kind of reading.

So there has gradually come to exist a considerable general awareness of the fact that insect life is a peculiarly interesting sort of life, and that it is an excellent example of behavior determined almost entirely by instinct, that is, by an inherited capacity, present from birth and but little modifiable by education or experience, to do extraordinary and complicated things connected with food-finding, protection from enemies, mating, egg-laying, care of young and whatever other things are necessary to maintain life and to perpetuate the species under most various conditions.

Now if any one, entomologist, general zoologist or layman, would like to be able to turn to a single book in which a large range and variety of insect behavior are brought together, simply described and treated analytically with the aim not primarily of telling interesting stories, but of getting at a more fundamental understanding of the springs and control of instinct, I know of no book which can be more confidently recommended to meet this desire than the book in hand. The author, E. L. Bouvier, professor at the famous Museum of Natural History in Paris, and the translator, Dr. L. O. Howard, chief of the U. S. Bureau of Entomology, are both outstanding authorities on insects, and both can write clearly and interestingly, so the book is at once reliable and lucid. If, after reading it, you are impressed more than ever, despite the book's aim of analyzing and classifying "the psychic life of insects," with the amazing complexity and wonder of this life, this is only because the more one learns about it the more one truly realizes how amazingly complex and wonderful it is.

Proceeding from a consideration of the simpler, more rigidly mechanical, and hence more readily explained kind of insect behavior—more readily explained, that is, at least as far as relation between stimulus and reaction is concerned—the author moves on to a consideration of more elaborate and complex insect habits, reaching finally the highly specialized habits of the social wasps, bees and ants, often referred to by entomologists as the "highest" insects.

Despite a strong tendency to favor a mechanistic explanation of insect behavior wherever this seems at all possible, the author is forced by the impressive seeming of an element of intelligence and reason in such specialized and complex behavior as that shown by the social insects and other less familiar but hardly less wonderful ones to assume a position with regard to the origin of this behavior which aligns him squarely with the believers in the Lamarckian evolution factor of the inheritance of acquired characters. For Bouvier assumes that much of this highly specialized insect behavior must have been originally acquired by the use of intelligence and then so often repeated as to become an inherited species habit, hence an instinct. To accept such an explanation requires two assumptions that many biologists can not accept: namely, an assumption of a considerable degree of intelligence in insects and an assumption of the possibility of the inheritance of acquired characters.

But the general reader of the book need not worry