

accepted a professorship of preventive medicine in Washington University, St. Louis.

PROFESSOR GUIGNARD, for fifteen years director of the Paris School of Pharmacy, has resigned his appointment and is succeeded by M. Henry Gautier, professor of mineral chemistry at the school.

DISCUSSION AND CORRESPONDENCE

SPECIAL COMMITTEES ON ZOOLOGICAL NOMENCLATURE

TO THE EDITOR OF SCIENCE: The International Commission on Zoological Nomenclature is trying a plan of cooperation with international committees representing the various branches of zoology in an effort to determine in how far it will be possible to reach a unanimous agreement upon the names of the most important zoological genera, together with the type species of the genera in question.

The International Commission of Medical Zoology, established at the Graz Congress, has undertaken a study of over three hundred names applied to the trematodes reported as parasitic in man. This commission is to pass upon the zoological status of the names in respect to synonymy and validity. The report will then be submitted to the International Commission on Nomenclature. It is the plan of the latter commission to publish the report, and to invite criticisms upon the same from the zoologists of the world. After ample opportunity is given for such criticism it is the plan of the commission on nomenclature to attempt to reach a unanimous ruling upon the names, and to submit this ruling to the next international congress.

The secretary of the international commission on nomenclature is inviting specialists in other groups to conduct similar studies upon the most prominent and best known genera. The plan adopted is for the secretary to select three or more specialists of unquestioned international reputation in a given group, and to request these workers to add to their committee any colleagues whom they may desire. It is hoped that by this

means preliminary studies of fundamental and permanent value may be conducted, and that the contending factions, in respect to nomenclature, may be harmoniously united.

The secretary of the commission on nomenclature is adopting the plan of taking man as a center, first working out, so far as may be done unanimously, names to be adopted for the animals most intimately associated with man, and while the undertaking may require years of patient labor, it is hoped eventually to establish a list of not less than ten thousand generic names, agreed upon unanimously, first by the special committee, and then passed upon unanimously by the commission on nomenclature. It is hoped, further, that by this plan an immense number of useless synonyms can be unanimously agreed upon as such, and gradually eliminated from general zoological literature.

The scheme naturally depends upon the amount of cooperation on the part of the special committees, which will be formed as rapidly as the work will justify.

C. W. STILES,

*Secretary International Commission
on Zoological Nomenclature*

FACTS AND PRINCIPLES

TO THE EDITOR OF SCIENCE: May I have space in your columns to reply to the criticism of Professor R. S. Woodworth in your issue of November 25, on my article, "American Educational Defects," which was printed in SCIENCE on October 28, 1910? I have no desire to enter into any needless controversy, but Professor Woodworth seems to me to have misunderstood my language and misconceived my purpose in a way that makes an answer desirable.

There would be little profit in my discussing with Professor Woodworth whether my article is banal or not, which is purely a matter of taste and judgment; but one observation in this connection seems to me pertinent, namely, that there is nothing particularly novel about truth, and that, if educational inefficiency is as prevalent as I have claimed it to be, it would not be strange if it had

been noted repeatedly, nor that there should be general agreement as to its main cause. I should also like to add the explanation that I did not aim to present novel so much as significant truth, and that in writing I bore in mind the maxim of Dr. Johnson to the effect that men need to be reminded rather than informed.

It would also be idle to discuss the orthodoxy of my method. "Orthodoxy," a witty English bishop once explained, "is my doxy; heterodoxy is another man's doxy," and the same definition will serve for what is sound scientific method to-day. I did not aim at orthodoxy of method, but at effective presentation of truth in writing; and it seems to me that this is more important than orthodox procedure. In my discussion I had to treat a very large subject within very narrow limits, and there is less detail in it than I should wish, but the practical result of my method was to enumerate certain abuses and limitations that I thought I detected in our educational theories and practises, and to explain them as the result of certain economic and temporal conditions the existence of which I indicated. Now whatever the theoretical excellence and unquestioned orthodoxy of Professor Woodworth's method, its practical result in his criticism, if he wished to counteract the effect of what I said, should have been to bring forward some reason for believing that the abuses and limitations that I have pointed out do not exist, and that I am either mistaken or malicious when I say that they do. Instead of this, however, its practical result is to use a great many indefinite expressions as if they had an exact significance, and to claim that my case fails unless college presidents and members of governing boards profit directly from the way they administer their trust.

The question of the consistent and accurate use of language is, I know, quite as indeterminate as the two preceding points I have dealt with; for experience has taught me how the mobile and fluid nature of philosophic ideas prevents their being designated and differentiated with entire success by

means of language. In an article as compressed as mine, I had to use far fewer checks and elaborations than the character of the ideas demanded, but in spite of this, I do not feel that Professor Woodworth has demonstrated that I have been guilty of any loose or inconsistent use of language. I used the word commerce, I think, consistently as "a gigantic business," founded as much on the caprices as on the necessities of men, an activity which is therefore likely to become dominated by "a pursuit of gain" that is more apparent than real which, instead of being an aid to progress, becomes a corrupting influence by creating an indifference to or an unconsciousness of much good that is equally important but less tangible. I did not mean to deny the value of commerce, and I did mean to make clear my opinion that, as a guide for human activity, it is an improvement over anything that has directed society in its earlier stages. My purpose was simply to show that the absolute control of thought and aspiration by any one activity is bound to create weaknesses that it is the business of education to strive to correct. In using the word commerce in the sense I have given, I have used it in accordance with a definition at once more specific and more comprehensive than Professor Woodworth's definitive one; and I have also, I think, laid more emphasis on its vital principle than on its visible exterior, which seems to me a sufficient explanation of what my meaning is when I say (as he predicted I would) that his criticism is an illustration of a very marked tendency to deal with facts and to neglect principles.

SIDNEY GUNN

MASSACHUSETTS INSTITUTE
OF TECHNOLOGY,
December 2, 1910

SCIENTIFIC BOOKS

The Conservation of Natural Resources in the United States. By CHARLES RICHARD VAN HISE. 8 × 5½ in., pp. xiv + 413, 16 plates. New York, The Macmillan Company. \$2.00 net.

As an expert in ores, an authority on geol-