

way, it was found to total 0.000079m³. It is seen that the amount of new growth is 18 times that killed in the same year.

Not only are saplings showing recovery of growth but older trees as well. Near the writer's home is a fine grove of chestnut trees of 30 to 40 years age; the tops were killed, but the trees are producing new crowns, in some cases recovering half their former height, and are now well set with fruit.

This condition seems common in southeastern Pennsylvania, the trees flourishing more on Chester and Manor soils than on the more sterile Dekalb. It may also be rather a widespread condition, for in passing through the mountains from Harrisburg, Pa., to Buffalo, N. Y., many trees were seen similar to those described. In the Niagara Peninsula of Ontario, especially near St. Catharines, recovery seemed evident.

The improved condition may not be due wholly to greater resistive powers but to a lessened supply of spores, for it is evident that the total production of *Endothia* spores is vastly lessened. The trees have also shown their ability to heal serious cankers, although ultimate recovery is not a necessary consequence.

Those trees, however, which seem most likely to survive and produce seed are in danger of extinction, since the public has been educated to believe that cutting of all chestnut trees from a woodlot is a virtue. Instead living ones should now be preserved. It might prove advisable to locate the best groves and to protect them from cutting and from fire.

ARTHUR PIERSON KELLEY

RUTGERS UNIVERSITY

THE SCIENTIST AND AN INTERNATIONAL LANGUAGE

ON reading the article of Dr. R. G. Kent on "The Scientist and an International Language" (SCIENCE, No. 1538, June 20) I am particularly glad to hear from a scientist of an English-speaking nation, of the need of an international language for scientists. I fully agree with Dr. Kent in discarding any existing national language as such. I want to call attention to a great handicap on the part of scientists belonging to a nation whose language is not widely intelligible. For instance, in the *Annotations Zoologicae Japonenses* and the *Folia Anatomica*, both published by Japanese biologists, all articles written in Japanese are excluded, and the editors of the Swedish journal *Acta Zoologica* will not accept papers written in Swedish. It is true that for some scientists writing in other languages this may not be felt as a serious handicap. But it remains true that some have the advantage of publishing papers in the mother language, while others have the disadvantage of endeavoring to write in a foreign language.

Dr. Kent proposes the use of Latin as an international auxiliary language among scientists. This was proposed by Zamenhof in his boyhood half a century ago. He soon discarded it, however, because of the extreme difficulty of learning that complicated language, and after years of painstaking effort he finally succeeded in inventing a language, which is now well known by the name of Esperanto.

It is not necessary to explain how easy it is to learn Esperanto, and how freely one can express one's opinion and can describe what he has in mind, even in scientific terms. Every Esperantist will tell you of it. For this reason it would not be desirable to adopt Latin as the spoken language in an international congress. Even if "we give Latin a preferred place in our study of foreign languages" I wonder how many of us would succeed, after a few years' course, in speaking Latin! Esperanto has already experienced a brilliant success in this respect. I believe that it is Esperanto that fulfills our desire of having a neutral auxiliary language in scientific circles.

I may be allowed to add, further, that in Japan some original papers have already appeared in this language in the fields of anatomy, pathology and veterinary science, and that there is a project among a few biologists of publishing an Esperanto bulletin of zoology. This, together with the fact that there exist international as well as local Esperantists' associations in the medical sciences and that several journals are published by them, is sufficient to show the practicability of this language in scientific publications.

HIROSHI OHSHIMA

KJUSU IMPERIA UNIVERSITATO,
FUKUOKA, JAPANUJO

BALL LIGHTNING

IN SCIENCE for August 8, Mr. W. J. Humphreys, of the U. S. Weather Bureau, requests information as to ball lightning.

Several years ago my home was struck by lightning. A ball of fire seemingly about nine inches in diameter was thrown into the center of my bedroom and exploded with a terrific noise, just as if a bomb had been exploded. Brilliant particles seemed to have been hurled into every direction, but I felt no effect other than that of sound and sight.

The electric wires throughout the house were affected, and there is an inch hole through the plastered wall on the ground floor where an electric spark seems to have found its path between the radiator in the room and the metal support to the water spout on the outside of the building.

I took the matter up with Dr. T. C. Mendenhall, with whom I was associated on the board of trustees of Ohio State University, and on expressing a doubt

as to my observations, I was assured by him that in his study of lightning for many years he had come across similar phenomena and that he felt sure that my observations had been correct.

JOHN KAISER

MARIETTA, OHIO

SWARMING OF DESERT MILLIPEDS

A QUESTION should be placed with "A note on migration of Myriapoda," in *SCIENCE* for July 25, 1924, regarding the identification of the "black objects" encountered in the desert of New Mexico as centipedes of the genus *Scolopendra*. Black centipedes are not known, but large black millipeds, commonly referred to the genus *Spirostreptus*, are widely distributed in the desert regions of western Texas, New Mexico and Arizona. The period of the summer rains is the breeding season of these animals, and in damp weather they often emerge in large numbers from the burrows of the desert rodents, though seldom seen at other times. That the "black objects" were not examined closely is indicated by the statement that "we stopped just long enough to notice that these objects were centipedes."

O. F. COOK

BUREAU OF PLANT INDUSTRY,
U. S. DEPARTMENT OF AGRICULTURE

SCIENTIFIC BOOKS

The Unstable Child. By FLORENCE MATEER. New York, D. Appleton and Co., 1924, pp. xii + 471.

DR. MATEER's book is a fairly complete manual for the administration of a psychological clinic, and there has been no book covering this important field as such. Furthermore, it contains the first review of psychometric methods that is at once broad and critical. These features themselves suffice to put it in the "indispensable" class for clinical psychologists for some time to come. The title might denote a book from the more strictly clinical viewpoint, rather less concerned with the administrative and research aspects of the topic. It is by no means devoted to case studies of conduct problems.

There are many useful suggestions on the conduct of psychometric examinations. On this matter the differing accounts of experts probably reflect the methods by which they personally get the best results, and as their personalities differ, so do the methods they sponsor. Dr. Mateer ranges herself with the advocates of year scale rather than point scale principles. A strong case is made out for giving the Binet type of scale according to topical categories, *e.g.*, all the "comprehension" tests together, instead of, for example, by years. Goddard is credited with first appreciating the significance of

"scatter," which is apparently quite correct, though the date of the reference cited, 1921, is later than several other publications on the point.

It is some years since Dr. Mateer first announced psychometric findings distinctive for congenital syphilis. A chapter is devoted to this matter, on which the author stands firmly to her guns. Generally inferior motor ability stood out clearly; the group are better in imaginal and verbalistic functions, and less good in "motor control and kinesthetic appreciation." There is fairly detailed presentation of the data, and Dr. Mateer apparently feels that the mental criteria can be given positive weight equal, if not prior, to serological methods.

The style of the book is more vivacious than is usually associated with such themes. At the same time there is no tendency to minimize the difficulties of the problems, or to arouse exaggerated expectations. The viewpoint is broad, and there are several entertaining philosophical reflections.

From the point of view of case presentation, a middle course is steered between considerable detail with few individuals, and a less full but more comparative treatment of larger numbers. Both types of presentation are illustrated, but the book would probably gain by additional presentations of the order chapter XI, devoted to the history of a single case. The medical aspect of the topic is not overstressed; the circumstances under which the material was derived were hardly conducive to error in this direction. Considerable stress is laid on the concept of "psychopathy," a term in psychiatric usage differential with feeble-mindedness, and the further distinction of the two concepts is a useful one. The second part of the book is indeed entitled "The Practice of Psychopathy" which, like the title of the whole book, is somewhat beside the mark; happily it does not denote a *vade-mecum für Irrsinnige, oder solche, die es werden wollen*.

Dr. Mateer's early training was in an environment dominated by one with all the contempt of genius for conventionalities of diction. The influence seems to survive in a few such expressions as torpidity and encroachment. Did the author's illustrious preceptor also use rule of thumb to denote meticulousness, disinterested as equivalent to uninterested, data with a singular verb, and write *aufgabe* thus, like a word of English? Dr. Mateer warns that accumulations of elaborate apparatus and "engraving-like beauty in written reports" are at times compensations for deficiencies of clinical capacity and judgment. So may these rhetorical peccadilloes be themselves but the foil of high excellence and trustworthiness in more vital things.

F. L. WELLS

BOSTON PSYCHOPATHIC HOSPITAL