

fact that Regiomontanus had died in 1476; more than twenty years before Copernicus arrived in Rome, according to the date given above. In fact, Copernicus was only a little more than three years old when Regiomontanus died, and hence the numerous references to his having studied astronomy under Regiomontanus, which appear in many places besides those noted above, are ridiculous.

The main justification for calling public attention to such errors seems to be that such publicity may tend to check the baneful influences of these errors, and hence it seems to be especially desirable to direct attention to the comparatively few errors which remain in the most meritorious of the extensively used books. In view of the fact that the present writer was criticized in a recent number of this periodical, volume 59, page 191, for directing attention to a minor error relating to a pioneer in mathematical research in our country, he would simply say that his remarks were not intended for those who see practically no difference between the statements "in charge of the Nautical Almanac," and "did much work on the Nautical Almanac," and "was consulting astronomer from 1849 to 1867." He would also like to state here that his interest in the correction of historical errors was not inspired by the feeling that he himself had never committed such an error, but, on the contrary, by the chagrin caused by being so frequently misled by authorities in whom he had placed undue confidence. The destruction of undue confidence is an important step in the study of the history of science.

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#### A NOTE ON MIGRATION OF MYRIAPODA

THE periodic migrations of certain insects and other animals have held the attention of biologists for generations and continue to afford items of fresh interest from time to time. A careful survey of the literature on this subject does not reveal any previous observations recorded on migrations of centipedes; in fact, it appears the universal consensus of opinion that centipedes do not migrate.

Last August (8-18-23), while crossing the desert stretch between Lordsburg and Mesilla Park, New Mexico, in company of Professor Oscar B. Jacobson, of the University of Oklahoma, we encountered what appeared to be a migration of centipedes. We had driven along for a number of minutes paying little or no attention to the black objects scattered here and there in our pathway. When at last they became so numerous that the wheels of our Ford killed one every yard we stopped just long enough to notice that these objects were centipedes. They measured from five to seven inches in length and belonged to the genus *Scolopendra*, order *Chilopoda*. It was

high noon when this scene was encountered. With only an occasional exception, these creatures were headed due north, progressing at a fair pace. A feature of unusual interest to me was their uniform distribution over the ground, each one apparently occupying a space of about four or five square feet. There was no vestige of vegetation present in this region nor even kindly rocks which might have afforded shelter for these creatures. We thought of possible mishaps to our "Lizzy," the thirsty radiator and perhaps a forced stay in this most uninviting, inhospitable environment and drove on. Fully ten more minutes were consumed in driving through this sea of centipedes, and countless victims remained behind in our tracks. We breathed a sigh of relief when the scattered outposts were reached and the burning sands alone reflected the heat of the brilliant desert sun.

I am at a loss to explain the phenomenon just cited. The time of the day when the observation was made does not agree with the normal habits of centipedes, which are nocturnal. Of course we know that certain birds, whose activities are restricted to daylight, make prolonged nocturnal flights during their migrations.

The nature of the terrain, sand without vegetation or rock shelter, coupled with the fact that all the creatures seen were adults and the mass movement was unidirectional, is, I believe, sufficient reason to preclude a breeding ground.

It is true that the month of August is in the rainy season of that section of New Mexico, for we were daily pursued by or chasing a storm until after we passed Tularosa on our way to Roswell. Tremendous quantities of water flow from all directions toward the principal depressions of the desert, the so-called sinks. If the presence of water had driven these centipedes from their haunts, why would they not scramble for dry ground in all directions?

Any theories suggested placing the responsibility for this phenomenon would, for the want of proof, remain as mere conjectures. To summarize: the time of the day when the observation was made, the enormous number of individuals making up this vast colony and the unidirectional course they pursued add only mystery to this observation until it is substantiated by someone else and studied at length.

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#### CORRECTION OF NAME OF SNAIL

RECENTLY, in *SCIENCE* of May 16, 1924, N. S. Vol. LIX, No. 1533, the writer published a note giving an account of the training of a snail in this laboratory. Unfortunately the writer had been incorrectly informed as to the proper designation of the subject

of the experiment. This fact was called to his attention. He is indebted to Professor Wm. H. Dall, Hon. Curator, Div. Mollusks, U. S. Nat. Museum, and to Professor Junius Henderson, Curator of Museum, University of Colorado, who after careful examination of specimens resembling the subject of the experiment pronounce the snail *Rumina decollata* Linne. According to these authorities these snails are natives of Europe and were introduced into this country and now flourish in Texas which is the source of supply of the snails being studied in this institution.

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### INTERNATIONAL SEED EXCHANGE

NEARLY a hundred botanic gardens in different parts of the world issue annually or biennially a seed list for the purpose of mutual exchange. In the past two years nearly 3,000 different genera of plants have been offered in these lists.

The botanic gardens publishing seed lists are chiefly those of Europe. Outside of Europe are in Asia four, namely Tokyo, Sapporo, Buitenzorg and Tiflis; in Africa two: Kirstenbosch near Cape Town, and Tunis; in South America: Montevideo; in North America: Ottawa and Brooklyn.

Are there not other institutions, for example, in the Western States, or in Australia, that might be interested in receiving seeds from different parts of the world in exchange for those of their local plants? The undersigned invites correspondence regarding this matter.

ALFRED GUNDERSEN,  
Curator of Plants

BROOKLYN BOTANIC GARDEN

### SCIENTIFIC BOOKS

*Nervous and Mental Reeducation.* By S. I. FRANZ. pp. 225. New York, Macmillan, 1923.

STUDIES in reeducation were among Dr. Franz's first contributions, and this volume summarizes an accumulated experience in the subject. It is treated from the standpoint of reeducation of specialized capacities, as of paralyzed limbs or speech functions, and only briefly from the standpoint of the personality as a whole, for example, in the final chapter on "The Psychotic." The viewpoint is that of the physiological psychologist, distinctly from the therapeutic angle. The reading group to which it appeals is a broad one, including the physician interested in the management of voluntary motor dysfunction, and the non-medical specialist concerned with reeducative methods, as the occupational therapist. The first three chapters discuss general psychological principles as related to the special topic; here the author's

clearness of style shows to exceptional advantage and makes one feel that if he is ever interested to do so, he can give us a text in general psychology to rival Woodworth's. In these pages and even more so in the second section of the volume, "General Reeducation Principles," he stresses the advantage of quantitative methods in reeducation. This is the portion of most interest from the point of view of experimental psychology, and contains suggestions that may well be assimilated into psychometric technique, e.g., the hammer and nail exercise of p. 80, the tennis ball exercise of p. 87, the walking exercise of p. 110.

A drawback of the volume is its brevity, though this will be judged lightly by workers in allied fields who themselves venture on the task of writing books. It is apparent that chapters of a few thousand words, covering the reeducative aspects of poliomyelitis, of tabes, cerebral paralysis and speech defects, must be very fragmentary or very condensed. This book gives the latter impression. How much many who read the book for information will get from these chapters is an open question. Limitations of space seem to have excluded almost everything in the way of case material; the value of the latter for the present topic can hardly be overstated, and few can be in so good a position to make these contributions as Dr. Franz. This feature gives to the volume an introductory character, and a good deal is left to the further interest and learning capacity of the reader. In this connection one may wish that other and more casuistic work might be made better available by references, though Mackenzie's notable contributions to the general field are duly recognized.

On this topic from this author, one expects a work of great concreteness and practicality, and is not disappointed. It may be noted that Dr. Franz is one of the few whose contributions to the medical field have won him its honorary doctorate. On both psychological and medical sides, the book is stocked with management counsel. The hope must still be retained that the author will find time to give more insight into the rich casuistic material of which the matter of this book gives evidence.

F. L. WELLS

### THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

#### OPINIONS 78 TO 81

OPINION 78.—Case of *Dermacentor andersoni* vs. *Dermacentor venustus*: On basis of the premises presented, the commission is of the opinion that *Dermacentor venustus* dates from Marx in Neumann, 1897, type specimen Collection Marx No. 122 (U. S. National Museum), from *Ovis aries*, Texas, and that *Dermacentor andersoni* dates from Stiles, 1908, holo-