present their greatest defect, which is especially marked in this case, as they are indispensable in the study of deep leads.

The map accompanying Mr. Gee's report on Tanami is also heightless. That report tells a very different story. The field was only discovered in 1900, and the great difficulties in its development are in access and scarcity of water. The locality is 50 miles from the frontier of West Australia, 800 miles from the end of the South Australian railways at Oodnatta, and 696 miles from Port Darwin, on the northern coast. The goldfield was visited by Mr. H. Y. L. Brown, the Government geologist, in 1909, and in consequence of his favourable report and the increased number of prospectors, the Government sent Mr. L. C. E. Gee there as warden and magistrate. Mr. Gee has now furnished a very interesting report on the district, the prospecting mining work, the rainfall, climate, and aborigines, with lists of plants collected and birds observed. In spite of its tropical position, Mr. Gee describes the climate as very healthy. The rainfall observed in ten months was 15½ inches, and a good supply of water is often obtained from wells at about the depth of 150 feet. The surrounding country is called desert, but Mr. Gee describes it as containing much fair and some good pastoral country. The mining results hitherto have done little to fulfil the original expectation that at length a great gold-field had been discovered in South Australia.

J. W. GREGORY.

ENTOMOLOGICAL NOTES.

THE U.S. Department of Agriculture is anxious lest the mango-weevil (Cryptorhynchus mangiferae), which does so much harm to mango-plantations in other parts of the world, should be introduced into those recently established in Florida. The larva burrows into the seed while soft, where it remains for a considerable period, and is thus carried all over the tropics. In a circular issued by the Bureau of Entomology it is recommended that all mango sedes introduced into America should be opened and examined, and those selected for planting made to germinate under a wire-gauze screen.

The advent between 1900 and 1902 of the sugar-cane leaf-hopper (Perkinsiella saccharicida) into the sugar-cane plantations of Hawaii was the beginning of a great calamity which has befallen sugar-growers in four of those islands; for by February, 1903, the insect had spread over the whole area devoted to sugar-culture, and had become so numerous as to constitute a serious pest. Its spread was greatly facilitated by the fact that in those islands only half the crop is harvested at a time, so that there is a continuous supply of nutriment. Moreover, there was an absence of indigenous enemies, although some native species have since taken to preying on the leaf-hopper. The species was introduced from Queensland; and the loss to planters in Hawaii during 1903 and 1904 from this and other insects is estimated at three million dollars. Bulletin No. 93 of the U.S. Bureau of Entomology is devoted to an account of the life-history of the leaf-hopper and the best means of checking its ravages.

In part ii. of the sixth volume of Records of the Indian Museum Dr. J. J. Kieffer continues his description (in French) of the gnats and midges of the family Chironomidæ in the collection of the Indian Museum, naming eightyseven species as new, the majority of which come from the Oriental region, although others are from the Suez Canal.

Parasitic Hymenoptera from the Transvaal form the subject of a paper by Mr. P. Cameron in vol. ii., No. 4, of Annals of the Transvaal Museum. In a previous paper the author was able to record, from material in the museum, only thirteen local representatives, but, thanks to a collection made by Mr. A. J. T. Janse, he now describes a very large number, some of which represent peculiar generic types, as new. The larval hosts of many of the species are likewise recorded. In this connection it may be noted that the serial quoted suffers from the absence of a table of contents or index to the various numbers.

Mr. J. W. Shoebotham has favoured us with a copy of a paper by himself from the July number of *The Annals and Magazine of Natural History* on spring-tails (Collembola)

new to the British fauna, with the description of a new species of Oncopodura, typically from Berkhampstead, Herts. The collection on which the paper is based was mainly made in the counties of Hertford, Buckingham, and Stafford.

Another addition to the British fauna is a coccid taken in ants' nests in Somersetshire by Mr. H. St. J. Donisthorpe, and identified by Mr. E. E. Green, in *The Entomologist's Monthly Magazine* for August, with *Ortheziola rejdovskyi*, a species hitherto apparently known only from Bohemia. At the conclusion of his paper Mr. Green discusses the serial homology of the segments of the antennæ in various members of the Coccidæ.

THE CULTIVATION OF LUCIDITY IN SCIENTIFIC WRITING.1

A CCORDING to the reports of examiners for medical degrees, many students seem unable to write an essay or thesis exhibiting any literary quality and style. The fault is not entirely that of the candidates. Whatever subjects they may have learnt at school, the writing of their own language has, in general, not been one of them. Even during their university career the use of the written English language, except as a machine for taking notes or answering examination questions, has not formed any regular part of their course.

The teaching of English is often understood to mean the attempt to teach a literary style by the imitation of good models; but what is really wanted is the power of expressing clearly one's own ideas in one's own language, and this ought now to be within reach of every English-speaking man and woman. The usual methods of teaching English still leave the average boy and girl singularly deficient in the art of saying what they mean on paper, however ready they may be in expressing themselves by the spoken word. This is largely due to the want of systematic practice in writing; moreover, essays are generally criticised by the teacher from the point of view of style rather than in respect of intelligibility. Students should learn to express their own meaning in absolutely clear and intelligible language before they think about the manner in which that language is to be manipulated. A split infinitive is a less important fault than a failure to make the meaning clear. Teachers and examiners of scientific subjects often say of a pupil or an examinee that he evidently understands what he is trying to say, but is merely unable to express his meaning, and then give him full credit for the knowledge and pardon him the failure to express it.

In these circumstances it is not surprising that much scientific writing of the present time is loose and unintelligible in its expression. The remedy is to cultivate the quality of lucidity; this will lay the foundation for a good style.

There cannot be clear writing without clear thinking, and he who learns to write clearly will in the process learn to think clearly. Except in the drafting of resolutions and telegrams, most people have little practice in making their meaning absolutely clear. Letters in the daily papers and many books and memoirs on scientific subjects fail singularly in the quality of lucidity. It would be a good thing if schools and universities had societies which gave their students the same valuable training in the use of the pen which their debating clubs give in the practice of fluent speaking.

In the scientific revival of the nineteenth century the great expositors who wrote with such admirable lucidity led the public to see that the study of science, like that of philosophy, is an education in clear thinking; but now that so much scientific writing is badly expressed, the impression is conveyed that the studies which lead to such loose writing cannot really be conducive to accurate and clear thought. The remedy is in the hands of students themselves, who can, by constant practice in everything that they write and by determination to make their meaning clear, cultivate the essential quality of lucidity before they try to acquire the graces of a good style.

 $^{\rm 1}$ From the introductory address delivered at St. George's Hospital on October 2 by Dr. H. A. Miers, F.R.S., principal of the University o London.