James Millikin University, to succeed Dr. Galloway.

J. A. MOYER, professor of mechanical engineering in the Pennsylvania State College and director of the college extension work, has been appointed by Governor Walsh to the directorship of the extension service which is to be organized in Massachusetts.

JAMES KENDALL, D.S., has been promoted to be assistant professor of chemistry in Columbia University.

DR. L. G. ROWNTREE, of the department of medicine of Johns Hopkins University, has been elected professor of medicine and chief of the department of medicine in the University of Minnesota Medical School. Dr. Rowntree will devote practically his entire time to the service of the medical school, although he will have the privilege of seeing a limited number of patients who may be referred to him by physicians.

AT the University of Michigan, Junior Professors Peter Field, L. C. Karpinski and T. R. Running have been promoted to associate professorships of mathematics. Drs. Tomlinson Fort and T. H. Hilderbrandt have been promoted from instructorships to assistant professorships of mathematics. Dr. A. L. Nelson has been appointed instructor in mathematics.

DISCUSSION AND CORRESPONDENCE

THE PUBLICATION OF NEW SPECIES

IN these days when taxonomic literature has reached such enormous proportions and is growing so rapidly that even the specialist has difficulty in keeping up with the literature of his own particular group, it seems to me that the interests of science would be better subserved by the use of greater care in selecting the medium of publication of new species. The pages of such general magazines as SCIENCE should be devoted to papers of general interest to the scientific, and to scientific papers of a nature unsuited to the special periodicals. For example, with a magazine in America devoted exclusively to Mollusca, why should an occasional new species of mollusk be published in SCIENCE, thus compelling the student of mollusks to search the files of that bulky magazine in order to be sure of missing nothing in his systematic work? Why not send it to a magazine especially devoted to the subject? With several excellent bird magazines in the United States, why should a technical discussion of the taxonomic status of a bird species appear in SCIENCE? With magazines exclusively devoted to botany, why should a new species of plant found in Colorado be published in an annual report of an experiment station in a far distant state, a volume in which surely no botanist could be expected to look for such a description if he were working upon the plants of that particular group or that particular region? Are not the difficulties of systematic botanical and zoological work great enough without vastly enhancing them by scattering the descriptions of new species? The examples above given are mere samples of scores of similar instances which come to our attention every year, to the discouragement of hard-worked students, and especially those remote from very large libraries. Furthermore, there are altogether too many ephemeral publications of small educational institutions and local scientific societies, having very limited circulation, but publishing strictly taxonomic papers which often fail to reach the attention of specialists for years, and then suddenly bob up to cause confusion in nomenclature. To make matters worse, descriptions of new species sometimes appear in leaflets or small pamphlets, published privately or by some small institution or society and not forming part of any series into which they would be finally bound and thus preserved. What happens to such a leaflet when it reaches a library? Is it not usually lost? Is it likely to be easily available to the student of ten or twenty years hence, as it would be if published in *The Nautilus,* or *The Auk,* or *The Botanical Gazette,* or even in *Nature* or SCIENCE? In how many libraries may a student be able to find it in fifteen years? Although many new species are described at the University of Colorado, that institution has wisely excluded all such descriptions from its *Studies* and *Bulletin,* taking the position that they should appear in

periodicals especially devoted to the particular subjects, or in publications which have wide circulation and are well known to habitually publish such papers. If all publishers and naturalists would take the same position it would surely greatly simplify the work of the future systematist. JUNIUS HENDERSON

THE EFFECT OF CYANIDE ON THE LOCUST-BORER AND THE LOCUST-TREE

DURING the past five years a number of experiments have been made from the office of the Illinois state entomologist with methods for destroying the black locust-borer (*Cyllene robiniæ*). From articles appearing in SCIENCE during the last few months, especially those by Professor Fernando Sanford in the issue of October 9, 1914, and by Professor C. H. Shattuck in the issue of February 26, 1915, it seemed probable that at least a part of the borers in infested locust-trees might be killed by introducing small amounts of potassium cyanide into the trunk and bark.

Early in the spring of 1915, fifty black locust-trees, fourteen in a small grove at Athens, in central Illinois, and thirty-six in a large plantation at Union Grove, in northwestern Illinois, were treated with potassium cyanide and sodium cyanide in the following manner:

The trees selected were from one to seven inches in diameter and were nearly all badly infested with the larvæ of the locust-borer. The borers were still in their overwintering cells in the bark, but were just becoming active at the time. The cyanide was placed in the trees in auger-holes of one fourth, one half, three fourths, and one inch diameter, bored at different heights from the ground and different depths into the trunk. The amounts of cyanide used in single trees varied from one twentieth to one half an ounce. The chemicals used were potassium cyanide, 98 per cent. pure, in small lumps, and cyanide-chloride carbonate mixture in granular form, guaranteed to contain 35–38 per cent. sodium cyanide. After the cyanide had been placed in the trees, the auger-holes were tightly plugged with corks driven in with a hammer.

The fourteen trees at Athens were treated March 12, and the thirty-six trees at Union Grove, April 1, 1915. The results of the treatments were taken at Union Grove July 13 and at Athens July 15, 1915.

The results of this experiment showed no benefit by the treatment. Of the fifty trees treated, eight could not be located in the summer, owing to the dense growth of weeds and sprouts. The treatment of these eight trees did not differ materially from that given the forty-two examined, and could not have made any marked difference in the results. Of the forty-two trees examined in July, twenty-three were dead and nineteen alive. Of the nineteen living trees, all but three contained living larvæ of *Cyllene robiniæ*. In several cases living borers were found directly above and within six inches of the auger-holes, and in three cases the borers were within one inch of the auger-holes. Not only were the borers alive in the living trees, but in all cases where the trees had put forth leaves in the spring of 1915, living borers were present in numbers in the trunks, and could be found around the bases of the trunks of many of the trees that had not shown foliage the past spring. Not a single dead borer was found near the points where the cyanide had been placed.

While over half of the trees treated were dead, this was not entirely due to the effects of the cyanide, as at least twenty-five per cent. of the untreated trees in both groves had died from the effects of borer injuries. There can be no doubt, however, that the cyanide had a very injurious effect on the trees, as in all the living trees the bark was dead and the wood discolored for a greater or less distance around the holes where the cyanide had been placed.

It was an interesting fact, which has, however, no bearing on the effect of the cyanide on the trees, that some rodents, probably rabbits, had gnawed many of the trees around the auger-holes, deeply scoring the wood. There was no residue from the cyanide in any of the auger-holes when examined in July, whether the corks had been removed or not, and no odor of the cyanide could be detected in the wood.