

encouragement of research, and is tenable for one year. The financial board reports that Sir Eustace Gurney has offered to present to the university a farming estate of about 257 acres with a view to the encouragement of the study of forestry in the university; the net income in rent of the estate is about £100 per annum. The general board of studies reports that the council of the Royal Geographical Society has decided to make grants of £300 per annum for five years to the schools of geography in Oxford and Cambridge.

THE trustees of Columbia University have voted to admit women to the College of Physicians and Surgeons.

ELMER GEORGE PETERSON, A.M., Ph.D. (Cornell), was elected president of the Utah Agricultural College, on March 17.

DR. ROSWELL C. MCCREA, dean of the Wharton School and professor of economics in the University of Pennsylvania, has accepted a professorship of economics in Columbia University.

AT the University of Cambridge Mr. H. H. Brindley, of St. John's College, has been appointed demonstrator of biology to medical students, and Mr. C. Warburton, of Christ's College, demonstrator in medical entomology.

DISCUSSION AND CORRESPONDENCE "SCIENTIFIC AND APPLIED PHARMACOGNOSY"

TO THE EDITOR OF SCIENCE: Since the publication of my review of Professor Henry Kraemer's "Scientific and Applied Pharmacognosy," which was written at your request, I have received a letter from my Philadelphia colleague charging me with misrepresentation and other acts of unkindness. In reply I informed him that I was exceedingly sorry to learn that I had offended him and begged him to inform me where I had erred. This he has done in a second letter. I should be glad to have you give the readers of SCIENCE an opportunity to judge for themselves if I have been guilty of misrepresentation, even though quite unintentionally.

One of my statements to which Professor Kraemer makes objections is the reference to

failure to give credit to Tschirch's "Handbuch der Pharmacognosie" in his preface, viz.:

One point, however, is noteworthy as a curious omission. Among the works consulted, the author in his preface does not even mention Tschirch, or his predecessors Flueckiger and Hanbury.

The part of the preface to which I had reference reads as follows:

In the preparation of a book like the present it is self-evident that it is based upon the work of the great masters who have developed pharmacognosy from its inception. Among the works consulted by the author, and of which special mention should be made, are the following: . . .

Here follow a number of names and titles, those of the three scientists mentioned above being conspicuous by their absence.

Justifying this omission, Professor Kraemer points out in his letter that

On p. 1, I give Flueckiger's definition of pharmacognosy, and refer to my article in the footnote in which I have credited both Flueckiger and Tschirch with the great work that they have done. In this article I say:

Just now Tschirch's monumental work, "Handbuch der Pharmakognosie," is about being completed and excels anything that has heretofore been published not only in pharmacognosy, but in any department of pharmacy. This work, when it is completed with the other agencies which have been at work, will do much to establish pharmacognosy as a direct science and direct attention of scientists generally to its particular rôle.

The above quotation, however, is not to be found in the book, but is taken from a pharmaceutical journal to which reference is made in the footnote referred to, viz.:

Henry Kraemer, "The Rise and Development of Pharmacognosy," *Pharm. Era*, Oct., Nov. and Dec., 1912. In this article there occurs citation of the important literature of the subject.

No doubt, as reviewer I should have traced this footnote attached to the definition of the word pharmacognosy and have plodded through three numbers of the *Pharmaceutical Era* in order to ascertain that Professor Kraemer had, some time and somewhere expressed his appreciation of both Flueckiger and Tschirch. But whether Professor Kraemer appreciated the

¹ Presumably should read an exact science.

work of these masters or not was not at all the question. The fact remains that in the preface in which Vogl, Collin and others are referred to as the "great masters" and their treatises referred to as sources used in the compilation of Professor Kraemer's new book, the names of Flueckiger and Hanbury and that of Tschirch are conspicuous by their absence. That Professor Kraemer might have had a particular motive in omitting these names I had no thought of suggesting. That I merely referred to their absence as a "curious omission" ought to free me from the suspicion of any intended unkindness. As reviewer I could scarcely have said less. That later in the text two special references occur to Tschirch's "Handbuch" and that other references can be found to journal articles by Tschirch and his students does not alter in any way the failure to give credit to Flueckiger and Hanbury and to Tschirch as general sources of information, among which even the English translation by the writer of Gildemeister and Hoffmann's treatise "The Volatile Oils," and other special treatises are enumerated.

The writer had no intention to intimate that Professor Kraemer was ignorant of the master pharmacognocists referred to, for such intimation would appear ridiculous to all who know how well posted Professor Kraemer is. Neither was it the writer's intention to intimate that the omission was intentional, for all who know Professor Kraemer also know that he could impossibly be guilty of anything that had but a mere suspicion of dishonor. If reference was had to the omission at all it was, no doubt, because it seemed well nigh impossible even to an amateur, much less to one so well informed and careful as Professor Kraemer. That it did occur merely shows that even the best of us will make slips of omission, if not of commission, with our editorial pens.

That the writer should have offended a colleague of whom he has always thought highly he regrets very much. The real reason for sending you this communication is not that I desire to justify my statement, but that it gives me the opportunity to correct any un-

favorable impression which my statement may have made upon the minds of those who have thought my review worth reading.

Professor Kraemer also objects to my relation in paragraphs two and three and adds

I am at a loss to know to what you refer as apparently you have not understood my position from the beginning.

Under the circumstances I greatly regret that I ventured to write the review as requested. One thing I am certain of, namely this, that I had no intention to hurt Professor Kraemer's feelings any more than to misrepresent him. If I were not absolutely positive of this I should more than willingly apologize to my Philadelphia colleague.

Trusting that for Professor Kraemer's sake you will kindly supplement my review with this letter.

EDWARD KREMERS

FROGS CATCHING BUTTERFLIES

I HAVE seen common green bullfrogs, *Rana catesbiana*, catch and eat butterflies—the large, yellow and black, swallow-tailed *Papilio turnus*.

On our summer place in southern New Hampshire there was a brook where the horses were watered. In this pool there were many bullfrogs, and they were not very wild. Passing the watering place one bright, hot day in August, I saw a bevy of perhaps a dozen butterflies fluttering low over the bare, moist ground near the stream. They flew in an aimless and weak fashion not characteristic of this species, and occasionally settled upon the ground, about three feet from the water's edge.

Out of the water crept four big green bullfrogs. They went after the butterflies in the stealthy manner of a cat stalking a mouse. They did not hop or jump, but walked, or crawled, on all fours, flat on the ground—sometimes advancing rapidly, sometimes stopping short with one leg stretched out far behind. Their bodies were strained and quivering, and their interest in the pursuit did not lag for an instant.

When a frog was within a foot of a butterfly it jumped upon it and caught it in its mouth. They ate the butterflies very quickly,