

was made at Juachi, where the Cochabamba and Bopi Rivers unite to form the Beni. Here the party was entertained by Sr. Mostaja, a representative of the house of Denniston & Co., of New York and La Paz. Large and important collections were made at this place, the most important being the barks of the genuine and spurious Cotos. From the materials here collected the species yielding these barks (*Nectandra Coto* and *Ocotea Pseudo-Coto*) were described by the author. Here also was collected a quantity of Siaya flowers, belonging to a small palm, and one of the most fragrant of known flowers. A root called Mire (pronounced mee-ray) was found that possesses strange and powerful physiological powers. Its identity could not be established, as it bore neither flowers nor fruits, but the lecturer thought it to be related to Manaca.

The next stop was at Rurrenabaque, a town on the shore of the Beni, just at the base of the Andean foot-hills. Here the party established its headquarters, and remained for many weeks. Long expeditions were made into the surrounding regions. Dr. O. E. White, of the Brooklyn Botanic Gardens, who was collecting orchids for Dr. Oakes Ames, of Harvard, made most of his collections in this region. Dr. William M. Mann, of the United States Bureau of Entomology, made very large collections of insects, especially of ants and termites. Dr. N. E. Pearson, of the University of Indiana, who was collecting fishes for Dr. Eigenmann, made important collections. The lecturer made a careful study of Cocillana and its allies, which grow in abundance in these forests. His general botanical collections at this place were very large, although he was so crippled and in such poor health that work was very difficult.

This region was described as producing the greatest variety of wild edible fruits that the lecturer had ever encountered in a similar area, and an important collection of these was preserved in formaldehyde solution. These fruits, after being botanically determined, will be placed on exhibition in the Economic Museum of the New York Botanical Garden.

An expedition was made to the little-known Lake Rogogua, in central Bolivia, but the season was such that its outlet could not be traversed or explored. Early in December, the author's physical condition had become such that further work was impossible and he returned home, stopping for short periods at a number of towns en route. The rest of the party remained and continued work into the spring months. Mr. Gordon MacCreagh and his two assistants in motion-picture work ascended the Rio Negro and Manaos, and thence made their way into southeastern Colombia, where they obtained authentic information regarding, and motion-pictures illustrating the strange ceremony of Caapi-drinking, and secured material of this plant for chemical and physiological investigation.

The total number of plants collected was about 2,300, represented by some 15,000 specimens and representing about 1,500 species.

THE USE OF THE LIBRARY BY STUDENTS.

BY EDWARD KREMERS.

In this textbook-ridden age it is difficult indeed to get students to use the general library. Moreover, since so much of our original literature is published in foreign languages, which so many students seem to hate more than poison,

the task of the bibliographic instructor is no mean one. The difficulty can be overcome only by diligent and persistent instruction of the individual student.

The best point of attack for this task seems to be the thesis. With the aid of the YEAR BOOK and the "Digest of Criticism" the student can be asked to get acquainted with the abstracts pertaining to his subject. The preparation of a bibliographic sheet for each article is the next step. This should involve looking up the original no matter in what foreign or domestic journal. Here is where the instructor must lend a helping hand, not only once or twice, but in connection with every sheet that is prepared. Inasmuch as laboratory work and library work on the thesis should constantly go hand in hand, this process of working with the student should continue throughout the academic year. Professor Richtmann, *e. g.*, has found it convenient to assign Saturday mornings to this task and, for this purpose, meets his thesis students in the stacks of the university library. However, the students can be asked to bring volume after volume to the desk of the instructor.

It is remarkable how the original dread of books, especially of those printed in foreign languages, gradually gives way to a certain familiarity. In thirty years of experience along this line, the writer has been agreeably surprised many and many a time to find that the student learned to love to browse among the books in the stacks. After all, good books are some of the best friends we possess and to enrich the life of the student with such friends is a task well worth all the time and trouble it takes on the part of the teacher.

PHARMACEUTICAL APPRENTICESHIP, A POSSIBLE EDUCATIONAL RENAISSANCE.

BY EDWARD KREMERS.

The drug store that, once upon a time, played a proud part in the training of the prospective pharmacist, has at last repudiated the apprentice. The college, having slowly adapted itself to the new condition, finds that whereas the high school affords a better general preliminary education, it of necessity falls short in special training. The result is that much information of an elementary nature must be imparted to young men and women which should have been offered to the more receptive minds of boys and girls.

Because of this unsatisfactory state of affairs an educational experiment was tried during the year's summer session of 1922 with boys and girls who had just graduated from the grammar schools of Madison and who had expressed their intention to go to high school. Instruction was imparted, not with the aid of textbooks, but by having the pupils do things. The story of this five weeks' course of necessity consists for the most part of details that cannot be reported in an abstract. Suffice it to say that the experiment was a complete success.

The chief value of this educational experiment does not lie primarily in having given this small class of boys and girls a mental impetus—valuable as this may be—such as they possibly have never received before, neither does it consist in having proved to the experimenter what he knew must be true if but given a fair trial. The real success or failure of this experiment will depend upon the adoption, or rejection, of the lesson to be learned by both pharmaceutical practitioners and