

The Relation of Fungi to Human Affairs. William D. Gray. Holt, New York, 1959. xiii + 510 pp. Illus. \$8.50.

Book Reviews

The Incas of Pedro Cieza de León.

Translated by Harriet de Onis. Victor Wolfgang von Hagen, Ed. University of Oklahoma Press, Norman, 1959. lxxx + 394 pp. Illus. \$5.95.

In 1535 a 13-year-old Spanish boy, from Llerena in Estremadura, sailed from Seville to Cartagena. There he joined one of the armies of exploration and conquest that were being formed and set off into the interior. Fifteen years later he emerged at Lima, Peru, as a mature soldier preparing to return to his homeland. His journeys and trials had not brought him great wealth, but the things he saw and reflected upon during all this time were chronicled in a manuscript that he took back to Spain with him. This man was Pedro Cieza de León, one of the great soldier-historians of the Spanish conquest of the New World, a man who ranks along with Bernal Diaz del Castillo in his ability to relate an event with straightforwardness more vivid than the purplest prose.

Between 1535 and 1550 Cieza had served with such men as Robledo, Belalcázar, and La Gasca. He had seen the Cauca Valley and the Quimbaya Indians. He entered Quito when the memories of Atahualpa were still alive. And he had been on the plain at Xaquixahuana when La Gasca broke the forces of Gonzalo Pizarro to end Peru's bloody civil wars in 1548. Commissioned as an official historian by La Gasca, Cieza spent the next two years traveling through Peru and Bolivia making a systematic inquiry into Inca history and culture. This, in brief, was the experience detailed in eight books of which only the first had been published when Cieza died in 1554.

Cieza was a man with strong humanist leanings, and his writings revealed his concern over the European mistreatment of the Indians. Because of the critical nature of his comments on this subject, his plans for the publication of the remainder of his work ran afoul of the Inquisition. His manuscript was, in

effect, impounded in the archives of the Council of the Indies where, except for some pirating and plagiarizing late in the 16th century, it was forgotten. A bad translation of a part of his first book was published in English in 1709, but it remained for W. H. Prescott to "rediscover" Cieza when he drew upon this remarkable source for his *Conquest of Peru*. Later, Sir Clements Markham published the whole of the first two books in English; and there have been subsequent Spanish editions and other English translations of both the first two books and of sections of other books.

The present Onis-Von Hagen edition utilizes those parts of books 1 and 2 which deal with Cieza's travels in the domain of the Inca between 1547 and 1550. The original chapters have been rearranged, however, so that they follow the traveler on his journey from north to south. Other chapters have also been assembled to form a kind of Inca ethnography and history. In each case the chapters are labeled to show their original provenience and position in the Cieza volumes. The whole has been put together with a long introduction by Von Hagen, and interlaced through the book are a series of 32 excellent half-tones illustrating the landscape and archeological monuments which Cieza saw and described. This is a very effective presentation, and it serves to give the work a great popular appeal without in the least detracting from its scholarly qualities.

The De Onis translation is the finest in English, and I think there is little doubt that this rendering of Cieza de León is the best all-round presentation of both the man and his writings which has yet appeared in print. Von Hagen shows great perceptiveness, imagination, and feeling in his creation of the historical contexts, both immediate and on the larger scale of 16th-century world politics.

GORDON R. WILLEY
Peabody Museum of Archaeology and Ethnology, Harvard University

This is a textbook designed for a somewhat unusual type of course which might be called "economic mycology"—a specialized branch of "economic botany." This may seem, to the outsider, to be rather too much concentration on too limited a subject, but in this one will soon agree with the author that, in fact, the subject is far greater than can possibly be contained in 510 pages. Gray, however, does an excellent job of making a clear and well-organized summary of the field. He begins with a brief description of the morphology and classification of the fungi, and then divides the major portion of the book into two sections: the "Beneficial activities of fungi," and "Harmful activities of fungi." Let me just list the topics covered, for the magnitude of the activities of fungi are indeed impressive. Under the beneficial activities we find the destruction of organic wastes; mycorrhizae; fungi as food and their role in food processing (especially cheese); fungi in medicine (especially antibiotics, but many other topics as well); alcohol fermentation; the syntheses of gallic, citric, gluconic, itaconic, and kojic acids, as well as various enzymes, glycerol, and fats; the use of fungi in bioassays; and then a fair group of miscellaneous activities. Among the harmful aspects we find plant diseases, timber and paper destruction, tropical deterioration of materials and objects, food spoilage, and medical mycology (allergies, mycoses, and mushroom poisoning).

The material presented in the summary of each of these subjects is well chosen to give an effective picture. Furthermore, it is a modern picture for the author has taken pains to bring the topics discussed up-to-date. If the reader wishes to pursue any of these large topics further, there is a well selected bibliography at the end of each chapter.

It should be reemphasized that this is a textbook and not a literary essay, such as, for instance, John Ramsbottom's *Mushrooms and Toadstools*. In fact, the two books, both excellent in their own way, are at opposite poles (and there are others that lie somewhere in between). Ramsbottom's style is lively and witty, while Gray's is wholly unobtrusive. Ramsbottom concentrates on a few topics of special interest, while Gray gives a balanced and well-rounded