

neurological bases of reflex and tropistic action and the classical experiments in this field; summaries of points of view of Freud, Jung, Adler and Meyer, together with the general concepts of psychoanalysis, such as the unconscious, and the technique of psychotherapy; the presentation of cases under his treatment in the hospital at Washington and in the war hospitals of France; the neurological bases for sensations of voluntary movements; brief and consistent historical sketches and commentaries on each topic; presentation of the specific fundamental evidences on "both sides" of moot questions; new concepts of *psychotaxes* or the tendencies of the mind to adjust itself to pleasant and unpleasant situations of a mild sort, and *parataxes*, or borderline cases of abnormal emotional adjustments exaggerated beyond psychotaxes but not yet become psychoneuroses; emphasis on the synthetic counterpart necessary to analysis in mental troubles; the idea of a plan of life as a means of seeing your own way out of mental troubles and for rebuilding abnormal lives; a glossary of technical terms and the up-to-date references to periodical literature.

The author differs from many text-book writers on certain points such as the driving forces of human nature, which he considers to be impulses or abilities, many in number. Affective mental states are independent forms of mental life, not merely attributes of sensations, but arising from them and from intellectual insight. The Lange-James theory is reversed, to state that intellectual insight into a situation is the cause of an emotion, which in turn produces complex bodily resonance, in part specific and in part common to all emotions. His chapters on the freedom of the will and the soul arise from the discussion of voluntary action.

Adversely, it may be said that the book is not usable as a basic text for elementary courses because of the almost total neglect of the cognitive processes; such as, sensation, perception, imagery, imagination and learning, memory and thought processes and most of the special senses and capacities. It does not cover the field of general psychology. Whereas the treatments are dualistic or vitalistic in most cases, the titles are behavioristic and misleading to this extent. The classification of mental capacities is unserviceable.

As a whole the book forms a very readable presentation of the special fields of reflexes, kinesthesia, volitional and abnormal psychology and psychotherapy. The well-written historical and critical sketches which introduce each topic recommend it for use as a special reference in these fields as well as an introduction for the general reader.

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*Catalogue of the Mycological Library of Howard A. Kelly.* Compiled by LEUIS C. C. KRIEGER. Baltimore, privately printed, 1924.

THIS sumptuous volume of 260 large octavo pages is a valuable contribution to the bibliography of American botany. The preface comprising five pages gives the acknowledgment of Dr. Kelly to the botanists and mycologists, past and present, who encouraged or gave aid to his mycological studies begun while he was a resident of Philadelphia. The contents of this finely bound book are arranged alphabetically. Then follows a description of exsiccata, periodicals, floras and miscellanea. The student of fungi and the working mycologist can hardly afford not to have this catalogue in their libraries. It will be indispensable to the botanical libraries of our colleges and universities. The compiler, Mr. Krieger, is an artist and mycologist of note, trained artistically at the Royal Academy of Fine Arts in Munich.

PHILADELPHIA, PA.

JOHN W. HARSHBERGER

## SPECIAL ARTICLES

### COCONUT BUD ROT EXPERIMENTS IN PORTO RICO

COCONUT bud rot has appeared in epidemic form on the western coast of Porto Rico, more than eight hundred cases having been recorded between Mayaguez and Rincon. The earliest observable symptom of the disease is the death of the youngest folded leaf, followed quickly by the death of other young vertical leaves which collapse and fall away, leaving the palm conspicuous by the absence of a central column of young leaves. The older leaves retain their normal color and position for several months, falling away one by one until the trunk is left naked. When a diseased bud is examined a brown decayed spot is usually found near the base of a young petiole. As underlying petioles are examined the decayed area is observed to increase in size and softness. The generative tissue is completely involved in a soft, watery, malodorous rot. There is no recovery.

A fungus was isolated from diseased buds and described as a small chlamydospored strain of *Phytophthora faberi* Maublanc. It grows well on culture media, produces abundant conidia and chlamydospores, and probably does not produce oospores. The conidia and chlamydospores germinate ordinarily by pushing forth several germ tubes, and germination by zoospore formation has not been observed. The conidia are 52.67 by 30.95 microns when measured from 8- to 10-day-old corn meal cultures. The average ratio of length to diameter is 1.69. The chlamydospores have an average diameter of 34.88 microns when grown on potato dextrose agar and corn meal. This figure is considerably smaller than the ones given